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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

Proceeding	91200832
Party	Defendant Honda Giken Kogyo Kabushiki Kaisha (Honda Motor Co., Ltd.)
Correspondence Address	SARAH R FRAZIER WILMER CUTLER PICKERING HALE AND DORR LLP 60 STATE ST BOSTON, MA 02109 UNITED STATES michael.bevilacqua@wilmerhale.com, john.regan@wilmerhale.com, shira.hoffman@wilmerhale.com, sarah.frazier@wilmerhale.com, silena.paik@wilmerhale.com,
Submission	Testimony For Defendant
Filer's Name	Shira Hoffman
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Signature	/Shira Hoffman/
Date	12/04/2015
Attachments	Pages from Conner Depo and Ex Public Filing - 1.pdf(5571813 bytes) Pages from Conner Depo and Ex Public Filing-2.pdf(5671882 bytes) Pages from Conner Depo and Ex Public Filing-3.pdf(3543377 bytes) Pages from Conner Depo and Ex Public Filing-4.pdf(3228188 bytes) Pages from Conner Depo and Ex Public Filing-5.pdf(5299497 bytes)

Confidential Deposition of Steven Scott Conner September 10, 2015

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NOTICE OF PUBLICATION

Serial Number: 78-924,545 Mark: Miscellaneaous Design International Class(es): 007

Applicant: Honda Giken Kogyo Kabushiki Kaisha (Honda Motor Co., Ltd.)

Attorney Reference Number: 103.443.241

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	OVI	ERVIEW	i
SERIAL NUMBER	78924545	FILING DATE	07/07/2006
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REGISTER	PRINCIPAL	MARK TYPE	TRADEMARK
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DATE ABANDONED	N/A	DATE CANCELLED	N/A	
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SECTION 8	NO	SECTION 8 IN PART	NO	
SECTION 15	NO	REPUB 12C	N/A	
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FILING BASIS

FILED	BASIS	CURRE	NT BASIS	AMEI	NDED BASIS
1 (a)	YES 1 (a)		YES	1 (a)	NO
1 (b)	NO	1 (b)	NO	1 (b)	NO
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44E	NO .	44E	NO	44E	NO
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MARK DATA

STANDARD CHARACTER MARK	NO
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COLOR DRAWING FLAG			NO				
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PARTY TYPE				20-OWNER AT	PUBLICATION	١	
NAME				Honda Giken Ko Ltd.)	ogyo Kabushiki	Kaisha (Hond	a Motor Co.,
ADDRESS				No. 1-1, 2-Chom Minato-Ku, Toky		ama	and the second s
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DATE	ENT CD	ENT TYPE	DESCRIPTION	ENT NUM
11/27/2010	PREV	0	LAW OFFICE PUBLICATION REVIEW COMPLETED	059
11/12/2010	CNSA	0	APPROVED FOR PUB - PRINCIPAL REGISTER	058
10/22/2010	TEME	1	TEAS/EMAIL CORRESPONDENCE ENTERED	057
10/22/2010	CRFA	1	CORRESPONDENCE RECEIVED IN LAW OFFICE	056
10/20/2010	ERFR	1	TEAS REQUEST FOR RECONSIDERATION RECEIVED	055
08/26/2010	GNFN	0	NOTIFICATION OF FINAL REFUSAL EMAILED	054
08/26/2010	GNFR	0	FINAL REFUSAL E-MAILED	053
08/26/2010	CNFR	R	FINAL REFUSAL WRITTEN	052
08/06/2010	TEME	1	TEAS/EMAIL CORRESPONDENCE ENTERED	051
08/06/2010	CRFA	I I	CORRESPONDENCE RECEIVED IN LAW OFFICE	050
08/04/2010	TROA	1	TEAS RESPONSE TO OFFICE ACTION RECEIVED	049
02/05/2010	GNRN	. 0	NOTIFICATION OF NON-FINAL ACTION E-MAILED	048
02/05/2010	GNRT	0	NON-FINAL ACTION E-MAILED	047
02/05/2010	CNRT	R	NON-FINAL ACTION WRITTEN	046
01/28/2010	ZZZX	Z	PREVIOUS ALLOWANCE COUNT WITHDRAWN	045
11/10/2009	PBSR	Z	WITHDRAWN FROM PUB - SENIOR ATTORNEY REQUEST	044
11/02/2009	PREV	0	LAW OFFICE PUBLICATION REVIEW COMPLETED	043
10/28/2009	CNSA	0	APPROVED FOR PUB - PRINCIPAL REGISTER	042
10/26/2009	TEME	ı	TEAS/EMAIL CORRESPONDENCE ENTERED	041
10/26/2009	CRFA	1	CORRESPONDENCE RECEIVED IN LAW OFFICE	040
10/26/2009	TROA	1	TEAS RESPONSE TO OFFICE ACTION RECEIVED	039
04/27/2009	GNRN	0	NOTIFICATION OF NON-FINAL ACTION E-MAILED	038
04/27/2009	GNRT	0	NON-FINAL ACTION E-MAILED	037
04/27/2009	CNRT	R	NON-FINAL ACTION WRITTEN	036
03/07/2009	TEME	ŀ	TEAS/EMAIL CORRESPONDENCE ENTERED	035
03/07/2009	CRFA	. 1	CORRESPONDENCE RECEIVED IN LAW OFFICE	034
03/04/2009	MAIL	-1	PAPER RECEIVED	033
10/29/2008	OP.I	Т	OPPOSITION INSTITUTED NO. 999999	032
09/02/2008	GNRN	0	NOTIFICATION OF NON-FINAL ACTION E-MAILED	031
09/02/2008	GNRT	0	NON-FINAL ACTION E-MAILED	030
09/02/2008	CNRT	R	NON-FINAL ACTION WRITTEN	029
08/18/2008	ZZZX	Z	PREVIOUS ALLOWANCE COUNT WITHDRAWN	028
07/30/2008	LOPT	1	LETTER OF PROTEST ACCEPTED	027

04/17/2008	ETOF	T	EXTENSION OF TIME TO OPPOSE RECEIVED	026
03/25/2008	PUBO	Α	PUBLISHED FOR OPPOSITION	025
03/05/2008	NPUB	0	NOTICE OF PUBLICATION	024
02/19/2008	PREV	0	LAW OFFICE PUBLICATION REVIEW COMPLETED	023
02/13/2008	CNSA	0	APPROVED FOR PUB - PRINCIPAL REGISTER	022
02/11/2008	TEME	1	TEAS/EMAIL CORRESPONDENCE ENTERED	021
02/11/2008	CRFA	1	CORRESPONDENCE RECEIVED IN LAW OFFICE	020
02/11/2008	TROA	1	TEAS RESPONSE TO OFFICE ACTION RECEIVED	019
08/15/2007	GNRN	0	NOTIFICATION OF NON-FINAL ACTION E-MAILED	018
08/15/2007	GNRT	0	NON-FINAL ACTION E-MAILED	017
08/15/2007	CNRT	R	NON-FINAL ACTION WRITTEN	016
08/12/2007	ZZZX	Z	PREVIOUS ALLOWANCE COUNT WITHDRAWN	015
07/23/2007	PBCR	Z	WITHDRAWN FROM PUB - OG REVIEW QUERY	014
07/06/2007	PREV	0	LAW OFFICE PUBLICATION REVIEW COMPLETED	013
06/28/2007	CNSA	0	APPROVED FOR PUB - PRINCIPAL REGISTER	012
06/22/2007	ACEC	1	AMENDMENT FROM APPLICANT ENTERED	011
06/22/2007	CRFA	1	CORRESPONDENCE RECEIVED IN LAW OFFICE	010
06/22/2007	ALIE	A	ASSIGNED TO LIE	009
06/11/2007	MAIL	1	PAPER RECEIVED	008
02/21/2007	CHAN	1	APPLICANT/CORRESPONDENCE CHANGES (NON- RESPONSIVE) ENTERED	-007
02/21/2007	COAR	1	TEAS CHANGE OF OWNER ADDRESS RECEIVED	006
12/08/2006	GNRT	F	NON-FINAL ACTION E-MAILED	005
12/08/2006	CNRT	R	NON-FINAL ACTION WRITTEN	004
12/07/2006	DOCK	D	ASSIGNED TO EXAMINER	003
07/13/2006	MDSC	0	NOTICE OF DESIGN SEARCH CODE MAILED	002
07/12/2006	NWAP	I.	NEW APPLICATION ENTERED IN TRAM	001

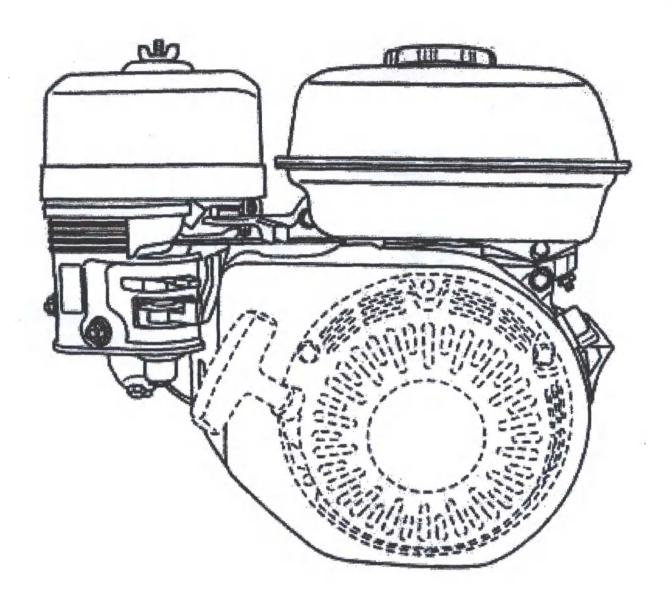
CURRENT CORRESPONDENCE INFORMATION

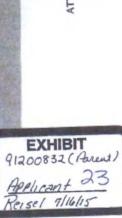
ATTORNEY	Michael J. Bevilacqua, Esquire		
CORRESPONDENCE ADDRESS	MICHAEL J. BEVILACQUA, ESQUIRE WILMER CUTLER PICKERING HALE AND DORR LL 60 STATE ST BOSTON, MA 02109-1800		
DOMESTIC REPRESENTATIVE	Michael J. Bevilacqua, Esquire		

PRIOR OWNER INFORMATION

PARTY TYPE	10-ORIGINAL APPLICANT
and the second s	

NAME	Honda Giken Kogyo Kabushiki Kaisha (Honda Motor Co., Ltd.)
ADDRESS	No. 1-1, 2-Chome, Minamiaoyama Minato-Ku, Tokyo, 107-8556
ENTITY	03-CORPORATION
CITIZENSHIP	Japan















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Lifan LF190F-BDQ 15 HP 420cc 4-Stroke OHV...











EXHIBIT
91200832 (Parent)
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Honda Engines



HONDA

Power

Equipment

AHPB 283891

EXHIBIT 91200832 (Parent)

Applicant <u>67</u> Conner 9/10/2015

A

ny big job worth doing can be accomplished a little easier with the help of a powerful, dependable engine.

Honda has been making engines for over 30 years, for a variety of needs and applications.

These engines all rely on advanced 4-stroke Honda engine technology, designed for durability and reliability.

Honda 4-stroke engines are available from 2.2 to 11HP sizes in horizontal and vertical shaft designs. The Overhead Valve design Hondas consume approximately 30% less gas and oil than comparable side valve engines. And they are up to 25% lighter.

Honda OHV engines keep vibration to a minimum with inclined cylinders, and in the larger models, dual synchrobalancers. And they're quiet due to Honda's superior muffler design.

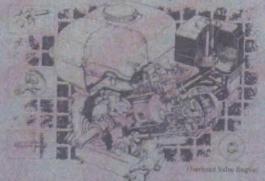
All Honda engines are designed for long life. Features like cast iron cylinder

sleeves, ball bearingsupported crankshafts and chrome top piston rings ensure an extended engine life.

Many models feature Honda's Oil Alert™ which automatically shuts off the engine before the oil level gets too low.

Honda OHV engines have features like Automatic Decompression and a maintenance-free electronic ignition for easy starts. And to maintain proper RPM when horsepower demands change, there's an accurate overdriven mechanical governor. Many models let you choose between electric or recoil starter systems. You can get different crankshaft sizes and reduction ratios too.

Routine maintenance is simple with easily serviced air filters, dual oil fillers with extension tubes, easy-clean fuel

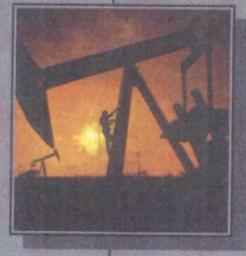


strainers and sediment bowls.

And after years of reliable service.

you'll appreciate
Honda's internal
self-rotator on the
exhaust valves that
prolong life, and the
simple, replaceable
valve guide design.

So whatever your needs, check out the full line of engines from Honda—the people who have been building engines, and a reputation for reliability, for over 30 years.





G100-a 2.2HP horizontal shaft lightweight engine, perfect for edgers and small minutes Includes Automatic Decompression, mechanical generator, and electronic contion.



(1150 – a 3.5HP horizontal shaft engine under 30 pounds with oit hath an elegener muffler hoat shield, fixed jet carburetor and more.



GPUI - SHP horizontal shaft with three shaft variations, 6-to-1 or 2-to-1 reduction, matther/heat shield and recol starter



G300—a 7HP horizontal chart mid-size all burpose engine with electronic spatton. Oil Alert¹⁸ and optional electric starter.



6-100—a powerful 10HP horizontal-shaft with synchro-balancer, dual-element air cleaner, electronic ignition and optional electric starter.



GV 150 - a 3.5HP vertical-shaft engine sized for rotary mousers with trockoid ailjump single cable throttle, oil filler extension tube.



GV200-a SHP vertical shall far rotary movers with electronic ignification, ball bearing-supported crankshaft, dual element air cleaner and mechanical governor.



GV 100 – 11HP vertical shaft, Honda's most powerful for riding and walk-behind mowers. Features dual synchro-balancers and optional electric starter.



och Ho-a 35HP OHV horizontal-shaft with Honda's exclusive Overhead Valve sign. And electronic contition. Lighter eight, lower fuel and oil consumption.



th V/20 - a 1HP OHV vertical-shaft engine with electronic ignifion and over driven mechanical governor for quick response.



6X 140 - a 5HP OHV horizontal shaft with electronic ignision, 34" diameter shaft or a 2-to-1 reduction with centrifugal clutch.



CN210—an 8HP ONV horizontal-shaft sine with 25 degree filled cylinder and wing shafts and reduction ratios.



GXV270—an 8.5HP OHV vertical shaft engine with overdriven mechanical governor, electronic ignition and easymaintenance features.



GX310 - an 11HP OHV horizontal-shaft engine with 25 degree tilled cylinder. Out Alert," electronic ignition, and varying shaft and reduction ratios.



6 NV840 - an 11HP OHV nestical-shaft en sine with easy-maintenance features. Oil Alert," and electronic ignition.

		FNGINES-SIDE VALVE										
SPECIFICATION:		6150	6200	6300	G400			GV 100				
Engine type	Single cylinder, side valve, 4-stroke, forced-air cooled (horizonta shaft)	cooled.	Single cylinder, side valve, 4-stroke, forced-air twoled, (horizonta shalt)	cooled	Single- cylinder side valve, 4-stroke, forced-air- cooleri, (horizontal shaft)	montag	Single cylinder, side valve, 4-stroke,	Single cylinder side valve.				
Bore and stroke	2.0° x 1.8°	2.5° x 1.8°	2.6" x 2.2"	3.0° ± 2.4°	3.4" x 2.8"	25° x 1.8	2.6 × 2.2	3.4" x 2.8				
Displacement	83cc	144cc	197cc	272	406ce	144cr	197cc	406cc				
Compression ratio	6.5:1	6.5.1	6.5.1	6.5.1	6.5:1	6.3:1	6.5:1	6.5:1				
Maximum power output	2.2HF @ 4200 rpm	3.5HP @ 3600 rpm	5HP @ 3600 rpm	7HP @ 3600 rpm	10HP @ 3600 rpm	3.5HP @ 3600 rpm	5HP @ 3600 rpm	11HP @ 3600 rpm				
Maximum torque	2.7 lbs ft. @ 3000 rpm	5.21bs. ft. @ 3000 rpm	7,7 lbs- ft. @ 2500 rpm	10.9 lbs. ft. @ 2500 rpm	16.7 lbs: ft. @ 2500 rpm	5.1 lbs fr. @ 2500 rpm	7.6 lbs- ft. @ 2500 rpm	17.7 lbs- ft @ 2500 rpm				
Puel tank capacity	.37 gallons	66 gallons	92 gallons	1.59 gallons	1.6 gallons	.53 gallons	50 gallons	61 gallons				
Lubricating oil capacity	48 qts.	74 qts.	.74 qts.	1.24 qts.	1.24 qts.	.63 qts.	.74 qta.	1.24 qts.				
Dry weight	18.7 lbs.	29.8 lbs.	33.1 lbs.	48.5 lbs.	66.1 lbs	29.7 lbs.	37.5 lbs.	73.7 lbs				
Dimensions (LxWxH)	10% x 10% x 132%	12°% x 15'% x 14°%	13"45 x 15%" x 16%5	15%2 x 16%* x 18%*	16%* x 17%; x 19%;	16% x 13% x 14°%	17%*x 12%*x 14%*	18% x 162% x 162% x				
PTO, shaft rotational direction	ccw	CCW	CCW	ccw	ccw	CCW	ecw	ccw				
gnition system	Electronic	Flywbeel magneto	Flywheel magneto	Electronic	Electronic	Flywheel	Electronic	Flywheel magneto				
tarting system	Recoil	Recoil	Recoil	Recoil	Recoil/ electric*	Recoil	Recoil	Recoil/ electric*				

'some models

	ENGINES - OVERHEAD VALVE										
SPECIFICATIONS			GX140		GXV270						
Engine type	25° tilted single cylinder, 4-stroke OHV air- cooled, (horizontal shaft)	Single cylinder, 4-stroke OHV, air- cooled, (vertical shaft)	25° tilted single cylinder, 4 stroke OHV, air- cooled, (horizontal shaft)	25° tilted single cylinder, 4-stroke OHV, air- cooled, (horizontal shaft)	Single cylinder, 4-stroke OHV air cooled, (vertical shaft)	25° tilted ningle cylinder. 4 stroke OHV, air- cooled, (horizontal shaft)	Single cylinder, 4 stroke OHV, air cooled, (vertical shaft)				
Bore and stroke	2,2" x	24° x 17"	2.5° x 1.8°	2.8' x 2.3"	2.9° x 2.3°	3.2° x 2.5°	3.2° x 2.5°				
Displacement	107cc	118cc	144cc	242cc	270cc	337cc	337∝				
Compression ratio	8,7:1	8.7:1	8.7:1	8.2:1	8.2.1	8.0.1	7.7;1				
Maximum power output	3.5HP @ 3600 rpm	4HP @ 3600 rpm	5HP @ 3600 rpm	8HP @ 3600 rpm	8.5HP @ 3600 rpm	11HP @ 3600 rpm	11HP @ 3600 rpm				
Maximum torque	5.0 lbs. ft. @ 2800 rpm	5.9 lbs- ft. @ 2700 rpm	7.9 lbs. ft. @ 2900 rpm	12 3 lbs. ft.@ 2500 rpm	13 lbs, ft. @ 2500 rpm	17.4 lbs fr. @ 2500 rpm	16.6 lbs fr. @ 2500 rpm				
Fuel tank capacity	.66 gallons	.26 gailons	.97 gallons	1.6 gallons	.6 gallons	1.7 gallons	3 gallons				
Lubricating oil capacity	.63 qts.	.65 qrs	63 qts.	1.16 qts.	1.27 qts	1.16 qts.	1.16 qts.				
Dry weight	26.5 lbs.	27.5 lbs.	30.8 lbs.	48.5 lbs.	57.3 lbs.	68.3 lbs.	66 lbs.				
Dimensions (LxWxH)	12.6" x 15.5" x 12.6"	14.8° x 13.0° x 12.8°	12.7° x 16.3° x 13.2°	15 2° x 16.5° x 16.1°	16.3" x 16.1" x 16.1"	15.9* x 17.5" x 17.1"	16.9" x 12.8" x 15.9"				
PTO shall rotational direction	ccw	CCW	ccw	ccw	ccw	ccw	CCW				
gnition system	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic				
Starting system	Recoil	Recoil	Recoil	Recoil/ electric*	Recoil/ electric*	Recoil/ electric*	Recoil/ electric*				

*some models

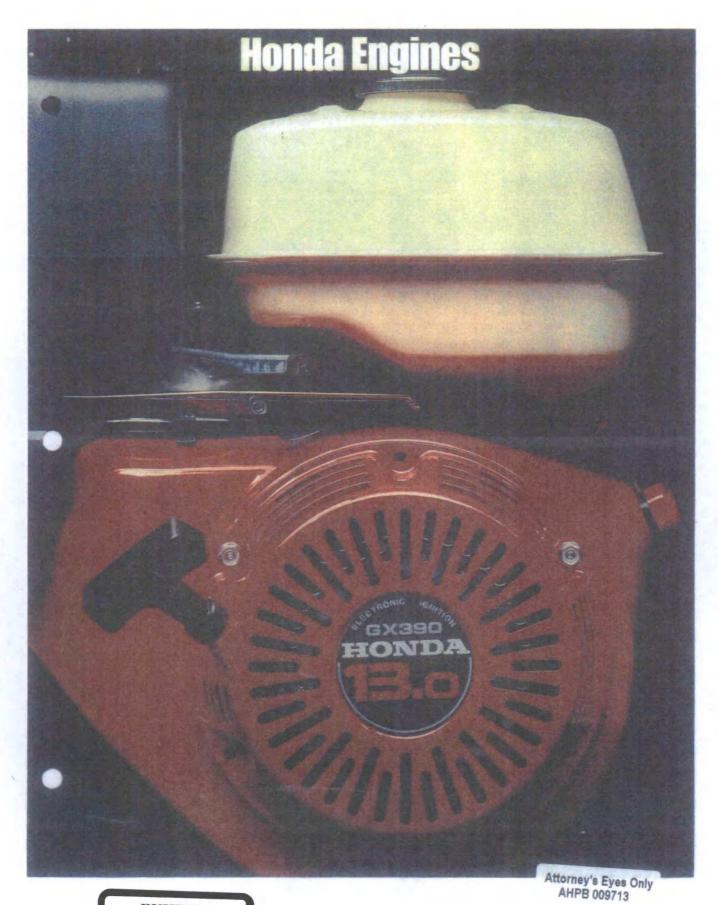


EXHIBIT 91200832 (Parent)

Applicant 68
Conner 9/10/2015

Attorneys' Eyes Only



Over the past three decades, Honda has become known as the leader in creating four-stroke engines that are

reliable, technologically advanced and easy to start.

Today, we offer a full line of engines from 2.2 to 20HP* in both horizontal and vertical shaft designs. Our Overhead Valve models have a lightweight design for reduced fuel and oil consumption. Honda engines will meet proposed 1995

CARB standards and offer enhanced performance, all with no change to existing external dimensions.

Our Horizontal Shaft engines have an optional Cyclone Air Cleaner specifically designed for use on Honda engines in dusty environments. The Cyclone Air Cleaner increases engine longevity by filtering air 99.9% pure before it enters the engine. Many of our engines feature Oil Alert* to warn the user before oil reaches an unsafe level.

Our larger engines utilize dual synchrobalancers to lessen vibration. And, all but one Honda engine come with Automatic Decompression for easy

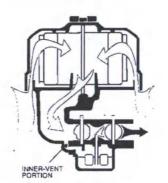


starting and maintenance-free electronic ignitions. Honda engines. They deliver the power you want. And the reliability you need.

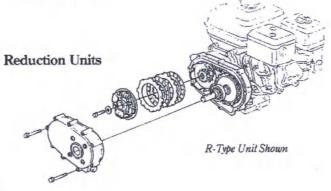
^{*} See Honda V-Twin engine brochure for details on 18HP and 20HP engines.

Air Filtration Systems

Honda offers a variety of air filters to match your application including dual-element, semi-dry, oil-bath, and Cyclone Air Cleaner with inner-vent carburetor. "Inner-vent" carburetors are now available on specific models with dual-element filters.

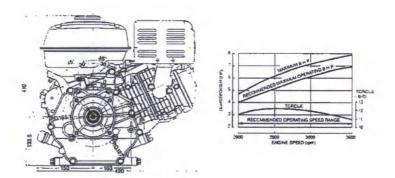


Honda's inner-vent carburetor places the float bowl vent on the "clean side" of the air filter elements so that the air/fuel ratio remains more constant as the elements become dirty. This allows the length of the service interval for air filter maintenance to be more than doubled.

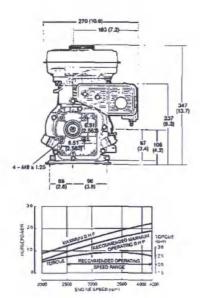


The 2-to-1 reduction unit is chain or gear driven and may include an automatic, centrifugally operated clutch. Clutch engagement occurs at 1800 rpm at the crankshaft; clutch lock occurs at 2200-3000 rpm, depending on the model.

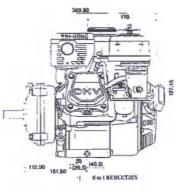
The 6-to-1 gear reduction is gear driven and does not include a clutch.

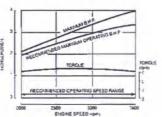


GX240-an 8HP OHV horizontal-shaft engine with electronic ignition and Oil Alert. Its uses include powering cement mixers, air compressors, and water pumps, as well as many other eonstruction applications.

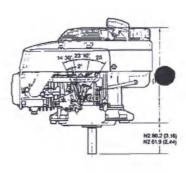


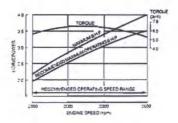
G100K1-a 2.2HP horizontal-shaft side valve lightweight engine.
Includes mechanical governor and electronic ignition perfect for edgers, pumps and small mowers.



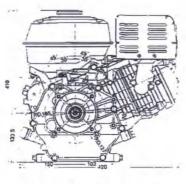


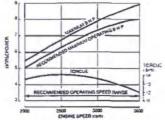
GX120-4HP OHV horizontal-shaft lightweight engine. Includes Automatic Decompression and Oil Alert for edgers, pumps, small construction equipment and reel-type lawn mowers.



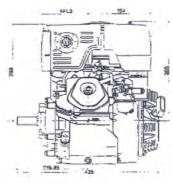


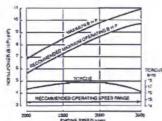
GXV120—a 4HP OHV vertical-shaft engine with electronic ignition and overdriven mechanical governor. Used most often for lawn mowers and a variety of industrial applications.



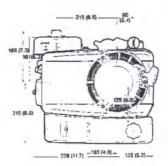


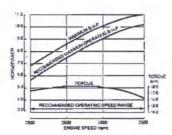
GX270—a 9HP OHV horizontalshaft engine with electronic ignition and Oil Alert. It has the same variety of uses as the GX240. With 1 more horsepower, this engine can make difficult jobs seem easy.



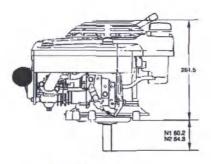


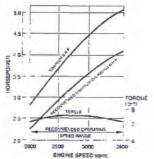
GX340—an 11HP OHV horizontalshaft engine with 25 degree tilted cylinder, Oil Alert, electronic ignition, available with varying shaft and reduction ratios. It's used for lawn mowers, pressure washers and a variety of construction equipment.



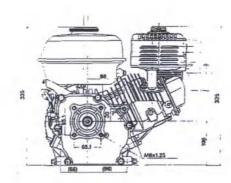


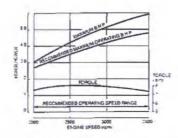
GXV340—an 11HP OHV verticalshaft engine with easy-maintenance features, Oil Alert and electronic ignition. Used for powering pressure washers, turf equipment and floor buffers.



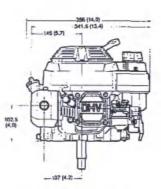


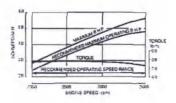
GXV140—a 5HP OHV vertical-shaft engine with electronic ignition and dual element air cleaner. Primary application is for lawn mowers (but can be used for a variety of applications).



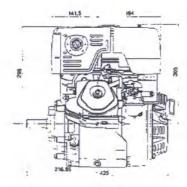


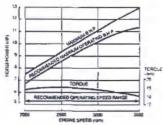
GX160-5.5HP OHV horizontal-shaft engine with electronic ignition and Oil Alert. Usage includes powering air compressors, generators, pumps, pressure washers, reel-type lawn mowers, cement trowels, and construction equipment.



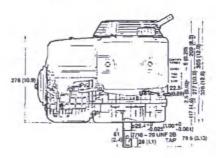


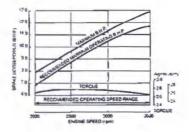
GXV160-a 5.5HP OHV verticalshaft engine with electronic ignition and dual element air cleaners. Uses include commercial lawn mowers and a variety of industrial products.



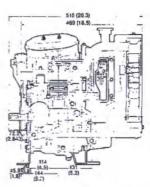


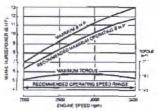
Y390—a 13HP OHV horizontalsnaft engine with automatic decompression for easy starting. The 13HP is the largest work-horse in our line of industrial engines.





GXV390—a 13HP OHV vertical-shaft engine with features like Oil Alert, and electric start capabilities. Designed with commercial lawn & garden, and floor care equipment in mind.





GX360—a 13HP horizontal-shaft liquid-cooled engine with twincylinders, Oil Alert, water temperature alert, electronic ignition and electric starter. Possible uses include lawn tractors, power washers and a variety of construction equipment.

HORSTYCHTER			NOR	ALFRI	HORIZONTAL SHAFT	TWAS IN	P.F.O.	REDICTION	BEDIATON	OPERSON TOND	RECOIL STARTES	STARTER	15 X	CHANDE	VANK RATE	WEIGHT
	MOME	TYPE.	VARIATION	OIL AL	HORGZ	VERTIEAL	CRANE PT 0.	1.07.8	2701	TOP CO	RECOR	dis act	TRANSISTO	ARR CLD	PER.Y	301.130
2.2	G100	KI	QA				2% x % dia. tapped = 28 UNF			4200				SD	1.48	1
4	GX120*	KI	QA				2% a % dia. tapped % 24 UNF			3900			*	OB	2,64	25
	GX120	KI	QX							3900				DE	2.64	25
	GX120	KI	QXC							3900				CY	2.64	38
	GX120	K1	QX5(1)			-				3900				DE	2.64	25
_	GX120*	KI	HX				2% x 4 dia.			3900				DE	2.64	35
	GX120 GXV120	K1	TX A1(6)	- 4		-	2% x 4 threaded			3900				DE	2.64	25
_	GXV120		D1	-	-		3% x 4 dia. tapped > 24 UNF			3600				DE	1.05	2
5.0	GXV140	-	A1(6)	-	-	-	The second second	-		3600	0.			DE	1.06	25
5.0	GXV140	_	NI NI	1	-		3% x 4 dfa tapped 4 24 UNF 2 x 4 dfa tapped 4 24 UNF		-	3600				DE	1.16	26
5.5	GX160	Kt	QA	-	-		2% x 4 dia tapped % 24 UNF		-	3600				DE OB	1.16	26
17765	GX160*	KI	QX				2 - x - out appea = 24 UNT		-	3900		-		DE	3.88	3-
	GX160	K1	QXS(1)							3900				DE	3.88	34
	GX160	K1	QXC				1			3600		-		CY	3.88	34
	GX160	K1	VX				2% x h dia. taper 2% per ft.			3900				DE	3,88	32
	GX160	K1	TX				2's x 's threaded			3900				DE	2.01	37
	GX160	K.1	RH				2% x 22mm tapped M8 x 1.25			3900				DE	3.88	45
	GX160	KI	QXE				2% x % dis. tapped % 24 UNF			3900				DE	3.88	35
	GX160	K1	LX				2% x 20 mm dis. tapped M8 x 1.25			3900				DE	3.88	35
	GX160*	KI	HX				2% x % dia.			3900				DE	3.88	39
	GXV160		NI				3% x 4-1 dia, tapped % 24UNF			3600				DE	2.01	35
	GXV160		A1(6)				3% x 4-1 dia. tapped % 24 UNF			3600				DE	2.01	46
B	GX240*	K1	QA				314 x 1 dia, tapped 1/4 20 UNF			3900				DE	6.4	56
	GX240	K1	QAE		9		3% x 1 dia. tapped = 20 UNF			3900				DE	6.4	63
	GX240	K1	QAS							3900	N/A			CY	N/A	54
	GX240	K1	QXC				3"4 x 1 dia. tapped % 20 UNF			3900				CY	6.4	.56
	GX240*	K1	HA	4			3% x 1 dia.			3900				DE	6.4	59
	GX240	K1	LA(3)	0			2°4 x 25mm tapped M8 x 1.25			3900				DE	6.4	59
	GX240	K1	PA				3½ x I dia. 14 NF threaded			3900	. 0			DE	6.4	56
_	GX240	K1	RA				2% x 22 mm tapped M8 x 1:25			3900				DE	6.4	62
-	GX240	K1	VA				4 % x 22.2 mm taper 2 % per ft.			3900				DE	5.4	Sé
9	GX270*	K1	QA				3 1 dia. tapped #24 UNF			3900				DE	6,4	56
-	GX270 GX270	K1 K1	QAE						-	3900				DE	6.4	62
-	GX270*	K!	HA		4		3% x 1 dia.			3900 3900				CY	6.4	56
	GX270	Kl	RA				2° × 22 mm tapped M8 × 1.25			3900				DE	6.4	67
_	GX270	K1	PA				3% x 1 dia. 14 NF threaded			3900			-	DE	6.4	56
	GX270	KI	VA				4"4 x 22.2 mm taper 24" per ft.			3900			-	DE	6.4	56
11	GX340*	K1	QA				3th x 1 dia. tapped % 24 UNF			3900				DE	7.4	69
	GX340	KI	QAE				a a a a and appearance	-		3900				DE	7.4	75
	GX340	K1	QXC							3900		-		CY	7.4	75
	GX340	Ki	QNE(4)							3900				DE	7.4	75
	GX340	KI	VA				4" a x % taper 2W per ft.			3900			4	DE	7.4	85
	GX340	KI	VXE							3900				DE	7.4	75
	GX340+	K1	HA				3% x 1 dia.			3900				DE	7.4	78
	GX340	KI	LX				254 x 25 mm tapped M8 x 1.25			3900				DE	7.4	77
	GXV340	KI	DA2				3% x 1 dia tapped % 20 UNF			3600	4			DE	W/O	72
	GXV340	Ki	DAET							3600			4	DE	2.2	78
	GXV340	K1	DAP							3600	*	(5)		DE	W/O	72
13	GX290°	KI	QA				3"6 x I dia, tapped 3-24 UNF			3900	a'			DE	7.4	69
	GX390	KI	QXC							3900				CY	7.4	69
	GX390	Kl.	QAE							3900			-11	DE	7.4	75
	GX390	K1	QNE(4)							3900	*			DE	7.4	75
	GX390	KI	VA				4% x 22.2mm taper 23° per ft.			3900				DE	7.4	69
	GX390	KI	VXE							3900				DE	7.4	75
	GX390	KI	HA				3% x 1 din.			3900				DE	7.4	78
	GX390	KI	LX		6.		2% x 25mm tapped M8 x 1.25			3900				DE	7.4	77
	GXV390	KI	DA2	-9			3 % ≥ 1 dia tapped = 20 UNF			3600	9		- 0	DE	W/0	. 73
	GXV390	KI	DAET							3600		8		DE	2.2	79



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GX Series Engines



EXHIBIT 91200832 (Parent)

Applicant 69 Conner 9/10/2015







here are many reasons to insist on genuine Honda engines. As the world's largest



(Pieturel clarkwise from above) Handa Advanced Robotics Aximo, Honda FCX Hydrogen Fuel Cell Vehicle. Honda CBR, Honda Jet

engine manufacturer, Honda offers more engine experience than anyone. Experience born on racetracks and roadways around the globe. Experience that keeps us on the cutting edge of engine performance technology and crosses our entire product line. From automobiles, race cars, motorcycles and all-terrain vehicles to marine engines, power equipment products and general-purpose engines, Honda is committed to designing products that meet or exceed the demands of our customers across the board. Based on the wide variety of products we offer with our Honda engines, we're experts at matching the right engine for the right job and producing engines that will "get the job done" no matter what your application.

Throughout our history, Honda has been dedicated to technological and environmental innovation, and today is no different. After all, we have a legendary reputation to live up to. A reputation for unsurpassed quality, performance and reliability. A reputation worth considering the next time you're in the market for an engine.



One Engine for All.

Honda certifies to the new, lower CARB 2007 and existing EPA Phase 2 emission requirements by offering 50-state compliant engines only. The development of one engine for ose in all 50 states continues to reflect Honda's forward thinking with regard to emission regulations, air quality and the needs of our customers. Our advanced engine technology allows Honda to remain compliant with CARB Tier 3 standards without the use of a cutalytic converter.

Net Power - SAE J1349

SAE J1349 measures net power with the manufacturer's standard air filter and muffler but without the governor system. It gives a reasonable indication of the power output in the application.

The power rating of the engines indicated in this document is the net power output tested on a production engine for the engine model and measured in accordance with SAE J1349 at the specified Actual power output for the engine speed of the engine in application, environmental conditions, maintenance and other variables.

rpms. Mass production engines may vary from this value. installed in the final machine will vary depending on numerous factors, including the operation



the Honda name.

The high-efficiency combu red by the OHC configurati helps Honda GC engines pass all xisting CARB and EPA emiss

The GX Series Engines have reliability written all over them.

T Tonda GX Series Engines

reliable, easy-starting and fuel

Honda GX Series overhead valve

engines on a wide variety of

premium power equipment.

construction, maintenance and

The rental industry, where power

equipment is subjected to the

ultimate test of durability, relies

heavily on Honda OHV engines

to ensure customer satisfaction

and repair. When it comes to

reliability, trust the engines with

and a minimal level of maintenance

■ Lhave long been recognized

as the industry leader in providing efficient small engines. You'll find

GX SERIES

Quality and performance are standard with Honda GX Series engines.

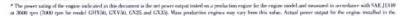
From cast iron cylinder sleeves to Automatic Decompression, Honda offers a variety of power solutions to meet your specific application. Choose from over 60 standard single cylinder engine variations A variety of features are available, depending on the specific model and application, including four types of air filtration systems and Oil Alerts which warns the user before oil reaches an unsafe operating level. Other options include 2-to-1 and 6-to-1 reduction units, one to 18 amp charging, lamp coils and shaft variations to suit every standard application. For the most current information on Honda engine technologies, visit our website at www.honda.com.

Environmental responsibility has been an integral part of our product development philosophy years before emission levels were established In fact, with minor modifications, the same GX Series engine design introduced in 1983 meets today's EPA and CARB emission level standards. Honda's advanced engine technology offers a number of distinct advantages including fuel savings, lower emissions and standardized replacement parts readily available through your local Honda Engines dealer.

Prove it to yourself.

Next time you visit a rental center, see a landscape truck or pass by a construction site, you'll probably see a Honda GX engine-powered piece of equipment. Stop and ask them what they think of the Honda engine. Chances are they'll tell you they wouldn't use anything else. Sure, you can find a less expensive engine, but you won't find a more reliable one.

Horizontal Shaft Air-cooled, 4-Stroke, OHV, single cylinder 1.65" x 1.42" (41.8 x 36 mm) GXH50 Bore x Stroke Displacement Compression Rati Net Horsepower* Net Torque* PTO Shaft Rotation 2.1 bp /1.6kW at 7.000 rpm 2.0 lbs N (2.7 Nm) at 4500 rpm Counterclockwise (from FTO shaft skie) Transitorized Magneto Recoil Starter Starting System Carburetor Lubrication System Float Type Forced Splash Governor System Air Cleaner Oil Capacity Centrifugal Mechanical Semi-dry Type 0.26 US gt (0.251) Fuel Tank Capacity (liter) 0.81 US qt (0.77t) Dimensions (L x W x H) 8.9° (225mm) x 10.8° (274mm) x 13.0° (353mm) Dry Weight 12.1 lbs (5.5 kg) Engine Type Air-cooled, 4-Stroke, OHC, single cylinder GX100 Bore x Stroke 2.2*x 1.6* (56 x 40 mm) 6.0 cu in (98 cm3) Compression Ratio 2.8hp (2.1kW) at 3.600 rpm 4,2 lbs ft (5.7 Nm) at 3,600 rpm Net Torque* P70 Shaft Rotation Crunterclackwise (from PTO shaft side) Transitorized Magneto Recoil Starter Ignition System Starting System Carburetor Lubrication System Horizontal type butterfly valve Forced Salash Governor System Air Cheaner Centrifugal Mechanical Dual Element Type 0.42 US qt (0.401) Oil Capacity Ost US of (C270) Ost US of (C270) Dimensions (L x W x H) 11.6" (295mm) x 12.0" (304mm) x 15.8" (402mm) Dry Weight 23.4 lbs (10.6 kg) Fingine Type Air-cooled, 4-Stroke, DHV, single cylinder GX120 Bore x Stroke Displacement 2.4" x 1.7" (60 x 42 mm) 7.2 cu in (118 cm3) Compression Ratio Net Horsepower* Net Torque* PTO Shaft Retation 8.5 : 1 3.5hg (2.6kW) at 3,600 rpm 5.4 lbs ft (7.3 Nm) at 2,500 rpm Counterclockwise (from PTO shaft side) Ignition System Starting System Transitorized Magneto Receil or Electric Starter Carturetor Lubrication System Horizontal type butterfly valve Governor System Centrifugal Mechanical Air Cleaner Oil Capacity Bual Element Type (opt Cyclone type) 0.63 US qt (0.61) Fuel Tank Capacity (liter) 2.1 US gt (2.00) Dimensions (L x W x H) Dry Weight 12.0° (305mm) x 13.4° (341mm) x 12.5° (318mm) 28.7 lbs (13.0 kg) Air-cooled, 4-Stroke, OHV, single cylinder Engine Type GX160 2.7° x 1.8° (68 x 45 mm) 9.9 tu in (163 cm3) Bore x Stroke Displacement Compression Ratio Net Hersepower* 4.8hp (3.5kW) at 3,500 rpm 7.6 lbs ft (10.3 Nm) at 2,500 rpm Net Torque* PTO Shaft Rotation Ignition System Counterclosississe (from PTO shall side) Transiturized Magnete Receil of Electric Starter Starting System Carburetor Lubrication System rizontal type butterfly valve Forced Splash Centrifugal Mechanical Dual Element Type (opt Cycline type) Governor System Air Cleaner 0.63 US at (0.60) Oil Capacity Fuel Tank Capacity (liter) 3.3 US qt (3.1) Dimensions (L x W x H) 12.0° (305mm) x 13.4° (341mm) x 12.5° (318mm) 28.7 lbs (13.0 kg)



Horizontal Shaft Engine Type Bore x Stroke Air-cooled, 4-Stroke, OHV, single cylinder **GX200** 2.7" x 2.1" (68 x 54 mm) 12.0 cu in (196 cm3) Compression Ratio Net Horsepower* Net Torque* PTO Shaft Rotation 5.5hp (4.3kW) at 3.600 rpm 9.1 lbs ft (12.4 Nm) at 2,500 rpm Gounterclockwise (from PTC shaft side) Ignition System Starting System Transitorized Magneto Recoil or Electric Starte Carbunston Horzontal type butterfly valve Forced Splash Centrifugal Mechanical Lubrication System Governor System Air Cleaner Dual Element Typ Oil Capacity 0.63 US qt (0.60 Fuel Tank Capacity (liter) 3.3 US qt (3.10 **Dual Element Type (opt Cyclone type)** 12.5" (321mm) x 14.8" (376mm) x 13.2" (335mm) 35.3 lbs (16.0 kg) Dimensions (L x W x H) Dry Weight Engine Type Bore x Streke Displacement Air-ccafed, 4-Strake, OHV, single cylinder GX240 2.3" x 2.3" (73 x 58 mm) 14.8 cu in (242 cm3) 7.1hp (5.3kW) at 3,600 rpm Net Horsepower* Net Torque* PTO Shaft Rotation 11.3 lbs ft (15.3 km) at 2,500 rpm Counterclockwise (from PTO shaft side) Ignition System Starting System Transitorized Magneto Recoil or Electric Starter Carburetor Lubrication System Horizontal type butterfly valve Forced Splesh Centrifugal Mechanical Governor System Air Cleaner Oil Capacity Dual Element Type (opt Cyclone type) 1.15 US qt (1.10) 55.10 (5.30 15.0" (380mm) x 16.9" (430mm) x 16.1" (410mm) 55.1 lbs (25.0 kg) Fuel Tank Capacity (liter) Dimensions (L + W x H) Bry Weight Engine Type Bore x Stroke Displacement Compression Ratio Air-cooled, 4-Stroke, OHV, single cylinder **GX270** 3.0" x 2.3" (77 x 58 mm) 16.5 cu in (270 cm3) 8 DEN 16 DWO at 3.500 rpm Net Horsepower* Net Torque* PTO Shaft Rotation 13.1 lbs ff (17.7 Nm) at 2.500 rpm Counterclockwise (from PTO shaft side) Ignition System Starting System Transitorized Magneto Recoil or Electric Starter Carburetor iorizontal type butterfly valve Lubrication System Forced Splash Centrifugal Mechanical Governor System Air Cleaner Dual Element Type Oil Capacity 1.16 US gt (1.10) Fivel Tank Capacity (lifer) 5.6 US gt (5.30) Doal Element Type (opt Cyclone type) 1.16 US qt (1.10) Dimensions (L x W x H) Dry Weight 15.0° (380mm) x 16.9° (430mm) x 16.1° (416mm) 55.1 lbs (25.0 kg) Engine Type Bore x Stroke Displacement Air-cooled, 4-Stroke, OHV, single cylinder GX340 3.2" x 2.5" (82 x 64 mm) 20.6 cu in (337 cm3) Compression Ratio 9.5hp (7.1kW) at 3,600 rpm 9.5hp (7.14M) at 3,600 rpm 16.3 lbs ft (22.1 Nm) at 2,500 rpm Counterclockwise (from PTO shaft side) Transitorized Magneta Receil or Electric Starter Net Torque* PTO Shaft Relation Ignition System Starting System Carburetor Lubrication System Horizontal type butterfly valve Governor System Air Cleaner Centrifugal Mechanical Dual Element Type (cpt Dyckine type) 1.15 US at (1.10 Oil Capacity Fuel Tank Capacity (liter) 5.4 US of (6.18) 15.0" (380mm) x 16.9" (430mm) x 16.1" (410mm) 68.3 lbs (31.0 kg)

final machine will vary depending on numerous factors, including the operating speed of the origins in application. Specifications are adject to change nation maintenance and other variables.

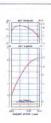
Horizontal Shaft cont.

GX390



Bore x Strake PTO Shaft Rotation Starting System Carburetor Lubrication System Governor System Dimensions (LxWxH)
Dry Weight

Air-cooled, 4-Stroke, DHV, single cylinder 3.5" x 2.5" (88 x 64 mm) 11.0hg (8.2xW) at 3,600 rpm 18.5 lbs ft (25.1 Nm) at 2,500 rpm Counterclockwise (from PTO shaft side) Transitorized Magneto Recoil or Electric Starter Horizontal type butterfly valve Forced Splash Centritogal Mechanical
Dual Element Type (opt Cyclone type) 1.16 US at (1.11) The Tank Capacity (liter) 6.4 US at 16.10
Dimensions (L x W x H) 15.9" (405mm) x 17.7" (450mm) x 17.4" (443mm)
Dry Weight 68.3 hs (31.0 kg)



PTO Shaft Variations

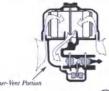


* The power rating of the engine indicated in this document is the net power output tested on a production engine for the engine model and measured in accurdance with SAE J1349 at 3600 rpm (7000 rpm for model GHX50, GXV50, GX25 and GX35). Mass production engines may vary from this value. Actual power output for the engine installed in the final machine will vary depending on numerous factors, including the operating speed of the engine in application, environmental conditions naintenance and other variables.

Air Filtration Systems

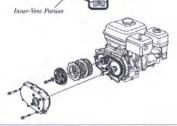
Honda offers a variety of air filters to match your application, including dual-element, semi-dry, oil-bath and Cyclone Air Cleaner with inner-vent carburetor. "Inner-vent" carburetors are now available on specific models with dual-element filters.

Honda's inner-vent carburetor places the float bond vent on the "clean side" of the air filter elements so that the air/fuel ratio remains more constant as the elements become dirty. This allows the length of the service interval for air filter maintenance to be more than doubled.



Reduction Units

The 2-to-1 reduction unit is chain or gear driven and may include an automatic, centrifugally operated clutch. Clutch engagement occurs at 1800 rpm and clutch lock occurs at 2200. The 6-to-1 gear reduction is gear driven and does not include a chutch.



GX SERIES

Vertical Shaft

GXV50



Engine Type Bore x Strake Displacement 1.65° x 1.42° (41.8 x 36 mm) 2.99 cu in (49 cm3) 8.0 - 1 2.1hg (1.5kW) at 7,000 rpm Net Torque" PTO Shaft Retation Ignition System 2.0 lbs ft (2.7 Nm) at 4,500 rpm Counterclockwise (from PTO shaft side) Transitorized Magneto Recoil Starter Starting System Carburetor Lubrication System Float Type Forced Splash Governor System
Air Cleaner
Dil Capacity Fuel Tank Capacity (liter)
Dimensions (L x W x H)

Centrifugal Mechanical Semi-dry Type 0.26 US qt (0.251)

0.29 US qt (0.27t) 9.8° (249mm) x 11.3° (285mm) x 7.8° (198mm) 11.5 fbs (5.2 kg)

GXV160



Engine Type Bare x Strake Displacemen Net Torque" PTO Shaft Retation Ignition System Starting System Carbureter Lubrication System Governor System Air Cleaner

Dry Weight

Air-cooled 4-stroke OHV single cylinder 2.7" x 1.8" (58 x 45 mm) 10 cu in (163 cm3) 4.3hp (3.2kW) at 3,600 rpm 7.1 lbs ft (9.5 Nm) at 2.500 rpm Counterclockwise (from PTD shaft side) Transitorized Magnets Recoil Stacter Horizontal type butterfly valve Ferced Splash Centrifugal Mechanical Dual Element Air Cleanes

OL Capacity

OL Ca

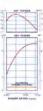


GXV340



Net Torque* PTO Shaft Retation Ignition System Starting System Carburetzr Lubrication System Governor System Air Cleaner Oil Capacity First Tonk Capacity (litter) Dimensions (L x W x H)
Dry Weight

An-cooled 4-stroke OHV single cylinder 3.2" x 2.5" (82 x 64 mm) 20.5 cu in (337 cm3) 8.5tg (E.6W) at 3.600 rpm 15.9 lbs ft (21.6 Nm) at 2,500 rpm Counterclackwise (from PTD shaft side) Transitorized Magnety Recoil and Electric Starter forcental type butterfly valve Pressure and Splash Centrifugal Mechanical Duel Element 1.2 US at (1.1b 2.2 US at (2.10 17.0° (433mm) x 15.0° (382mm) x 15.5° (406mm) 71.2 lbs (32.3 kg)



GXV390

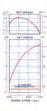


Engine Type Bare x Stroke Displacement Compression Rate Net Horsepower* Ignition System Starting System Carburetor Lubrication System Governor System Air Cleaner Oil Capacity 1.2 US at (1.10) Fuel Tank Capacity (liter) 2.2 US at (2.10) Dimensions (L x W x H)

Dry Weight

Air-cooled, 4-Stroke, CHV, single cylinder 3.5" x 2.5" (88 x 54 mm) 23.7 cu in (389 cm3) 7.7 : 1 10.21g (7.5kW) at 3,500 rpm 17.8 lbs ft (24.2 Nin) at 2,500 rpm Countectockwise (from PTO shaff side) Translitatized Magnetis Recoil and Electric Starter Haracotal type futterfly valve Pressure and Splash 17.0° (433mm) x 15.0° (382mm) x 15.9° (406mm)

73.3 lbs (33.3 kg)



Specifications are subject to change without notice.



Honda Pumps



HONDA

Power

Equipment

Attorneys' Eyes Only

EXHIBIT 91200832 (Parent)

Applicant <u>70</u> Conner 9/10/2015 Attorneys' Eyes Only AHPB308899

H

onda water pumps are used in agriculture, construction, emergency flood situations —even for boating and

personal home use.

Honda's portable water pumps will not only bail you out of trouble, they'll give you years of dependable service. The technology that goes into every Honda water pump is the result of over 30 years of engine craftsmanship. When you buy a Honda, you also get a reputa-

tion for reliability.

All of Honda's portable water pumps are powered by durable, fuel-efficient Honda four-stroke engines. The WH15X, WB20X, WH20X and WB30X feature Honda's exclusive OHV design, which is 30% more fuel-efficient than comparable side valve engines. This fuel-saving, efficient design is packed with long-life features like a cast iron cylinder sleeve and a crankshaft supported by ball bearings for increased durability.

And to insure year-after-year reliability, Honda water pumps are equipped with rugged cast iron impellers,* easy-

to-clean strainers and mechanical seals.

Because of advanced features like Automatic Decompression and no-maintenance electronic ignitions, these portable water pumps are easy to start, even after months of storage. And they're easy to move around, thanks to the lightweight and compact design.

But the most important feature of Honda water pumps is how they perform. These five pumps range in port sizes from 1½" to 3," and can pump up to a maximum of 290 gallons per minute.



The WBI5, WB20X and WB30X are standard water pumps designed for large volume watering applications including field irrigation, removing standing water, bailing out boats and emptying swimming pools.

The WH15X and WH20X are.

Honda's most powerful pumps, capable of displacing water at greater pressures or to higher discharge heights, even when used with long hoses. And all five pumps feature self-priming.

Honda portable water pumps. You can depend on them to get the job done quickly, easily and reliably.

*Except WB15





WB15 – The WB15 is Honda's lightest portable pump. With a 2.2HP four-stroke engine and 1½° ports, it can pump up to 53 gallons per minute.



WH15X — The WH15X is a high output, high pressure pump with a 35HP OHV engine, 1½° ports and a capacity of 106 gallons per minute.



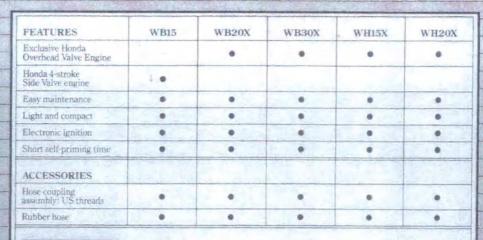
WB20X — The WB20X utilizes a 3.5HP OHV four-stroke engine. Lightweight and portable, it can pump 158 gallons per minute through its 2" ports.



WH20X — The WH20X is a high output, high pressure pump with a strong 5HP OHV engine, with 2° ports and a capacity of 132 gallons per minute.



WB30X — The largest portable is the WB30X with a 5HP OHV four-stroke engine, 3" ports and a capacity of 290 gallons per minute.





Suction hose and couplers

SPECIFICATIONS	WBI5	WB20X	WB30X	WH15X	WH20X
Engine: 4-stroke, single-cylinder, air-cooled	2.2HP Side Valve	3.5HP Overhead Valve	5HP Overhead Valve	3.5HP Overhead Vave	5HP Overhead Valve
Displacement	83cc	107ec	144ce	107cc	144cc
Bore and stroke	1.9"x 1.8"	2.2"x 1.7"	25"x 1.8"	22*x17*	25"x 1.8"
Compression ratio	6.5:1	8.7:1	8.7:1	8.7:1	8.7:1
Pump type	Centrifugal, self-priming	Centrifugal, self-priming	Centrifugal, self-priming	Centrifugal, self-priming	Centrifugal, self-priming
Self-priming time	120 sec. at 16.4 ft.	110 sec. at 16.4 ft.	150 sec. at 16.4 ft.	40 sec. at 16,4 ft.	60 sec. at 16.4 ft.
Drive system	Direct	Direct	Direct	Direct	Direct
Discharge capacity	53 gals./min.	158 gals./min.	290 gals./min.	106 gals./min.	132 gals./min.
Suction port diameter	1.5"	2"	3"	1.5*	2"
Discharge port diameter	15*	2"	3"	1.5*	2"
Total head lift	118 ft.	105 ft.	92 ft.	164 ft.	164 ft.
Suction head lift	26 ft.	26.2 ft.	26.2 ft.	26.2 ft.	26.2 ft.
Dimensions (LxWxH)	13.2"x 10.6" "x 13.6"	17.5"x 13.6" x 15.6"	20.5" x 15.7" x 17.7"	16,9"x 14.2" x 15.7"	17.1 "x 14.8" x 15"
Dry weight	28.7 lbs.	43 lbs.	59.5 Ibs.	54 lbs.	58.4 lbs.

For optimum performance and safety, we recommend you read the sweets manual before operating your Honda Power Equipment it. 1987 American Honda Motor Co., Inc. C0798. Specifications subject to change without notice.

AIR

Air Compressors

EXHIBIT 91200832 (Parent)

Applicant 7/ Conner 9/10/2015 AHPB 016480



Industrial Single-Stage Hand Carry Units

- 120V single phase 60 Hz. with 15 amp plug (electric)
- OHV Honda or OHC Robin engine (gasoline)
- Quality single stage compressor
- Aluminum crankcase and head with cast iron cylinder
- Thermal overload motor protection (electric)
- Start/stop control set at 95-125 PSI
- Compact and portable pancake and twin tank designs
- Oil lubrication
- 20% larger air tank capacity
- Drain valves and pressure release valve
- Protective pump/motor housing
- Rubber handles for better grip
- Stainless steel braided discharge hose (gasoline)
- Two-handled carrying capability (gasoline)
- Roll cage design (gasoline)
- Pneumatic throttle control (gasoline)
- Quick connect fittings
- One year limited warranty



AC1-HE02-05M



Industrial Single-Stage Hand Carry Units - Electric



CERTIFIE

	Model #			CFM @ 100 PSI			Net Wt. (lbs./kg.)
	ACT-HE15-04M	1.5	120V Electric	4.1	15.0	4 Gallon Pancake	49/22
d	AC1-HE02-05M	2.0	120V Electric	4.1	15.0	5 Gallon Twin Tank	57/26

Industrial Single-Stage Hand Carry Units - Gasoline

Model #	HP	Engine	CFM @ 100 PSI	Receiving Tank	Net Wt. (lbs:/kg.)
AC1-HH04-05M	4.0	Honda OHV	4.4	5 Gallon Twin Tank	74/34
AC1-HR45-05M	4.5	Robin OHC	4.4	5 Gallon Twin Tank	76/34



Industrial Single-Stage Wheelbarrow Units

- Industrial UL listed electric motor
- Industrial OHV Honda, Vanguard or OHC Robin engine (gasoline)
- Quality cast iron single stage compressor
- Cast iron crankcase (Aluminum on 6.5 HP unit)
- Aluminum head for heat dissipation
- 10" fly wheel for extra cooling and longer life (12" fly wheel on 6.5 HP unit)
- 14 gauge powder coated belt guard
- Powder coated 8 gallon twin tank receivers
- Auto start/stop on electric models (continuous run optional)
- Idle control for added safety (gasoline)
- Pneumatic tire with tube and steel hub
- Quality pilot valve (gasoline)
- Stainless steel braided discharge hose (gasoline)
- Two gauges for tank and outlet pressure
- Manual drain valves for proper maintenance
- Large canister intake filter
- Splash lubrication
- Includes regulator
- Dual voltage control (1.5 & 2.0 HP electric units)
- Two year limited warranty

Options

- Auto drain metal bowl (Electric) (AX-0001)
- Auto drain plastic bowl (Electric) (AX-0002)
- Manual drain metal bowl (AX-0003)
- Manual drain plastic bowl (AX-0004)
- Dual control (Electric) (AX-0005)
- Pneumatic throttle control (Honda) (AX-0006)
- Extended oil drain (Honda) (AX-0007)

ACI-PH55-08M

Industrial Single-Stage Wheelbarrow Units - Electric

	178			CLM A	1,00000	Hecelving	Netwi
(FR	Model #	HP	Motor	100 PSI	Amps	Tank	(lbs/kg.)
O.	AC1-PE15-08M	1.5	120V Electric	5.5	13.2	8 Gallon	176/80
selffer.		1000		NET NO	No.	Twin Tank	
	AC1-PE15-08M1	15	120V/230V	6.5	13.2.5.6	8 Gallon	176/90
CB.			Electric			Twin fank	
GE.	AC1-PE02-08M	2.0	120V Bectric	8.4	18.8	8 Gallon	178/81
THE PARTY.					-	Twin Tank	
	AC1-PE02-08M1	2.0	J20V/230V	18.4	18.8/9.4	8 Gallon	178/81
			Electric		Maria o	Twm Tank	
	AC1-PE03-08M	3.0	230V Electric	13.8	14.0	8 Gallon	184/83
						Twin Tank	
	*Includes Dual V	Itage	Control				

Industrial Single-Stage Wheelbarrow Units - Gasoline

Model #	HP	Engine	CFM @	Receiving Tank	Net Wt. (lbs./kg.)
AC1-PH55-08M	5.5	Honda OHV	8.9	8 Gallon Twip-Tunk	166/75
AC1-PR06-08M	6.0	Robin OHC	8.9	8 Gallon Twin Tank	166/75
AC1-PV06-08M	6.0	Vanguard OHV	8.9	8 Gallon Twin Tank	181/82
AC1-PH65-08M	6.5	Honda OHV	10.4	8 Gallon Twin Tank	154/70
AC1-PR07-08M	70	Robin OHC	10,4	8 Gallon Twin Tank	168/76

Job Pro Series

By Mi-T-M

Industrial Single-Stage Wheelbarrow Units

- Industrial UL listed electric motor
- Industrial OHV Honda, Intek or Vanguard engine (gasoline)
- Quality single stage compressor
- Cast iron cylinder
- Aluminum crankcase
- Aluminum head for heat dissipation
- 10" fly wheel for extra cooling and longer life (12" on 6.5 HP model)
- 14 gauge powder coated belt guard
- Powder coated 8 gallon twin tank receivers
- Auto start/stop on electric models (continuous run optional)
- Idle control for added safety (gasoline)
- Pneumatic tire with tube and steel hub
- Quality pilot valve (gasoline)
- Manual drain valves for proper maintenance
- Large canister intake filter
- Splash lubrication
- Regulator and outlet pressure gauge not included (sold as option)
- One year limited warranty

Options

- Auto drain metal bowl (Electric) (AX-0001)
- Auto drain plastic bowl (Electric) (AX-0002)
- Manual drain metal bowl (AX-9003)
- Manual drain plastic bowl (AX-0004).
- Dual control (Electric) (AX-0005)
- Pneumatic throttle control (Honda & Vanguard) (AX-0006)
- Extended oil drain (Honda) (AX-0007)
- Regulator (Gasoline) (AX-0014)



Industrial Single-Stage Wheelbarrow Units - Electric

	9	4.1	CFM @	Teady	Receiving	Net Wt.
Model #	HP	Motor	100 PSI	Amps	Tank	(lbs./kg.)
Model # AP1-PE15-08M	1.5	120V Electric	6.5			148/67
		and the same of th	A SOLDING	POSE	Twin Tank	500,00

Industrial Single-Stage Wheelbarrow Units - Gasoline

Model #	HP	Engine	CFM @	Receiving Tank	Net Wt. (lbs./kg.)
AP1-PH55-08M	5.5	Honda OHV	8.9	8 Gallen Twin Tank	145/66
AP1-PI55-08M	5.5	Intek OHV	8.9	8 Gallon Twin Tank	145/66
AP1-PV06-08M	6.0	Vanguard OHV	8.9	8 Gallon Twin Tank	153/70
AP1-PI65-08M	6.5	Intek OHV	10.4	8 Gallon Twin Tank	159/72



Industrial Two-Stage Wheelbarrow Units

- Industrial UL listed electric motor
- Industrial OHV Honda, Vanguard or OHC Robin engine (gasoline)
- Quality two stage compressor
- Cast iron cylinder

AC2-PE05-08M

AC2-PH08-08M

Receiving Net WL

Tank

8 Gallen

- Aluminum crankcase
- Aluminum head for heat dissipation
- 15.7" fly wheel for extra cooling and longer life
- 14 gauge powder coated belt guard
- Powder coated 8 gallon twin tank receivers
- Auto start/stop on electric models (continuous run optional)
- Idle control for added safety (gasoline)
- Pneumatic tire with tube and steel hub
- Quality pilot valve (gasoline)
- Stainless steel braided discharge hose (gasoline)
- Two gauges for tank and outlet pressure
- Manual drain valves for proper maintenance
- Large canister intake filter
- Splash lubrication
- Includes regulator
- Two year limited warranty

CFM @

Industrial Two-Stage Wheelbarrow Units - Gasoline

Industrial Two-Stage

AC2-PE05-08M

Wheelbarrow Units - Electric

Electric

Model #	HP	Engine	CFM @	Receiving	Net Wt. (lbs./kg.)
AC2-PH08-08M	8.0	Honda OHV	15.7	8 Gallon Twin Tank	214/97
AC2-PR09-08M	9.0	Robin OHC .	15.7	8 Gallon Twin Tank	212/96
AC2-PV09-08M	3.0	Vanguard OHV	15.7	8 Gallon Twin Tank	212/96

Options

- Auto drain metal bowl (Electric) (AX-0001)
- Auto drain plastic bowl (Electric) (AX-0002)
- Manual drain metal bowl (AX-0003)
- Manual drain plastic bowl (AX-0004)
- Dual control (Electric) (AX-0010)
- Pneumatic throttle control
- (Gasoline) (Consult factory)

AHPB 016484

Page 5



Industrial Single-Stage Units

- Industrial UL listed electric motor
- Industrial OHV Honda, Vanguard or OHC Robin engine (gasoline)
- Quality cast iron single stage compressor
- Cast iron crankcase
- Aluminum head for heat dissipation
- 10" fly wheel for extra cooling and longer life
- 14 gauge powder coated belt guard
- Powder coated ASME certified 20 gallon receivers
- Auto start/stop on electric models (continuous run optional)
- Idle control for added safety (gasoline)
- Pneumatic tires with tubes and steel hubs
- Two gauges for tank and outlet pressure
- Manual drain valves for proper maintenance
- Large canister intake filter
- Splash lubrication.
- Includes regulator
- Dual voltage control (1.5 & 2.0 HP electric units)
- Two year limited warranty

Options

- Auto drain metal bowl (Electric) (AX-0001)
- Auto drain plastic bowl (Electric) (AX-0002)
- Manual drain metal bowl (AX-0003)
- Manual drain plastic bowl (AX-0004)
- Pneumatic throttle control (Hofida) (AX-0006)
- Extended oil drain (Honda) (AX-0007)
- Dual control (Electric) (AX-0008)



Industrial Single-Stage Units -Electric

Model #	HP	Motor		Amps	Receiving Tank	Net Wt. (lbs./kg.)
C1-PE15-20M	-1.5	120V Electric	6.5	13.2	20 Gallon	189/96
AC1-PE15-20M1	15	120V/230V Electric	6.5	13.2/6.6	20 Gallon	189/96
AC1-PE02-20M	20	120V Electric	8.4	18.8	20 Gallon	191/97
AC1-PE02-20M1	2.0	120V/230V Electric	8.4	18.8/9.4	20 Gallon	191/97
AC1-PE03-20M 'Includes Dual V				14.0	20 Gallon	197/89

Industrial Single-Stage Units -Gasoline

Model #	HP	Engine	CFM @ 100 PSI	Receiving Tank	Net Wt. (lbs./kg.)
AC1-PH55-20M	5.5	Honda OHV	8.9	20 Gallon	197/89
AC1-PR06-20M	6.0	Robin OHC	8.9	20 Galton	194/88
AC1-PV06-20M	6.0	Vanguard OHV	8.9	20 Gallon	204/93
AC1-PH65-20M	6.5	Honda OHV	10.4	20 Gallon	210/95
AC1-PR07-20M	7:0	Robin OHC	10.4	20 Gallon	194/88



Industrial Two-Stage Units

- Industrial UL listed electric motor
- Industrial OHV Honda, Vanguard or OHC Robin engine (gasoline)
- Quality two stage compressor
- Cast iron cylinder
- Aluminum crankcase
- Aluminum head for heat dissipation
- 15.7" fly wheel for extra cooling and longer life
- 14 gauge powder coated belt guard
- Powder coated ASME certified 20 gallon
- Auto start/stop on electric models (continuous run optional)
- Idle control for added safety (gasoline)
- Pneumatic tires with tubes and steel hubs
- Stainless steel braided discharge hose (gasoline)
- Two gauges for tank and outlet pressure
- Manual drain valves for proper maintenance
- Large canister intake filter
- Splash lubrication
- Includes regulator
- Two year limited warranty

Options

- Auto drain metal bowl (Electric) (AX-0001)
- Auto drain plastic bow! (Electric) (AX-0002)
- Manual drain metal bowl (AX-0003)
- Manual drain plastic bowl (AX-0004)
- Dual control (Electric) (AX-0009)
- Pneumatic throttle control
- (Gasoline) (Consult factory)



Industrial Two-Stage Units -Electric

	1000		SE PHOLE	CFM @		Receiving	Net Wt.
-	Model #	HP	Motor	175 PSI	Amps	Tank	(lbs./kg.)
SP.	Model # AC2-PE05-20M	5.0	208-230V-	15.5	22.5-20	20 Gallon	266/121
CHA			Electric				

Industrial Two-Stage Units -Gasoline

Model #	HP	Engine	CFM @ 175 PSI	Receiving Tank	Net Wt. (lbs:/kg.)
AC2-PH08-20M	8.0	Honda OHV	15.7	20 Gallon	272/123
AC2-PR09-20M	9.0	Robin OHC	15.7	20 Gallon	270/123
AC2-PV09-20M	9.0	Vanguard OHV	15.7	20 Gallon	270/123

By Mi-T-M

Industrial Two-Stage Units

- Industrial OHV Honda, Vanguard or OHC Robin engine (electric start optional)
- Quality two stage compressor
- Cast iron cylinder
- Aluminum crankcase
- Aluminum head for heat dissipation
- 15.7" fly wheel for extra cooling and longer life
- 14 gauge powder coated belt guard
- Powder coated ASME certified 20 gallon receivers
- Idle control for added safety
- Stainless steel braided discharge hose
- Manual drain valves for proper maintenance
- Large canister intake filter
- Splash Jubrication
- Includes regulator
- Two year limited warranty

Options

- Manual drain metal bowl (AX-0003)
- Manual drain plastic bowl (AX-0004)
- Electric start batteries and cables not included (Honda) (AX-0015)
- Electric start batteries and cables not included (Vanguard) (AX-0013)



Industrial Single-Stage Units - Gasoline

		Party Comment	CFM @	Receiving	Net Wt.
Model #	HP	Engine	175 PSI	Tank	(lbs./kg.)
AC2-SH08-20M	8.0	Honda OHV	15.7	20 Gallon	266/121
AC2-SR09-20M	9.0	Robin OHC	15.7	20 Gallion	270/123
AC2-SV09-20M	9.0	Vanguard OHV	15.7	20 Gallon	270/123



Industrial Two-Stage Unit

- Industrial OHV Honda engine
- Electric start standard (includes battery)
- Quality two stage compressor
- Cast iron cylinder
- Aluminum crankcase
- Aluminum head for heat dissipation
- 15.7" fly wheel for extra cooling and longer life
- 14 gauge powder coated belt guard
- Powder coated ASME certified 30 gallon receivers
- Idle control for added safety
- Pneumatic tires (4) with tubes and steel hubs
- Stainless steel braided discharge hose
- Two gauges for tank and outlet pressure
- Manual drain valves for proper maintenance
- Large canister intake filter
- Splash lubrication
- Includes regulator
- Two year limited warranty

Options

- Manual drain metal bowl (AX-0003)
- Manual drain plastic bowl (AX-0004)



Industrial Two-Stage Unit

		St. institute	CFM @	Receiving	Net Wt.
Model #	HP	Engine	175 PSI	Tank	(lbs./kg.)
AC2-PH11-30M	11.0	Honda OHV	20.0	30 Gallon	and the second second

By Mi-T-M

Industrial Single or Two-Stage Units

- Industrial UL listed electric motor for a long life
- 208-230V single phase 60 Hz
- Quality single or two stage compressor
- Cast iron cylinder
- Large fly wheel for extra cooling and longer life
- 14 gauge powder coated belt guard
- Powder coated ASME certified 80 gallon receivers
- Auto start/stop (continuous run optional)
- Manual drain valves for proper maintenance
- Large canister intake filter
- Splash lubrication
- Two year limited warranty

Options

 Dual control (Two stage unit only) (AX-0012)



Industrial Single-Stage Unit -Electric

Model #	HP	Motor		Receiving Tank	
ACT-SE05-80M	5.0				

Industrial Two-Stage Units -

		100	CFM @		Receiving	Net Wt.	1
Model #	HP	Motor	175 PSI	Amps	Tank	(lbs./kg.)	1
AC2-SE05-80M	5.0	208-230V Electric					
AS3-VE75-80M	7.5	208-230V Electric	24.0	35.0	80 Gallon	407/185	



Industrial Two-Stage Unit

- Industrial electric motor
- Quality two stage compressor
- Cast iron cylinder
- Large fly wheel for extra cooling and longer life
- 14 gauge powder coated belt guard
- Powder coated ASME certified 120 gallon receivers
- Manual drain valves for proper maintenance
- Large canister intake filter
- Splash lubrication
- Two year limited warranty

Options

- Magnetic starter with mounting box and wiring (Consult factory)
- 208-460V option (Consult factory)



Industrial Two-Stage Units -Electric

Model #	HP	Mator	CFM @		Receiving Tank	Net Wt. (lbs./kg.)
AS4-HE10-120M	10.0	230V Electric 3Ø	30.5	22.0	120 Gallon	798/362
AS6-HE15-120M	15.0	230V Electric	43.8	40.0	120 Gallon	835/379
AS8-HE20-120M	20.0	230V Electric	54.9	50.0	120 Gallon	950/431



By Mi-T-M

Replacement Pump

- Single Stage
- Cast iron with aluminum head

Part # Description 3-0215 Single Stage



Replacement Pump

 Cast iron cylinder with aluminum head and sump

Part #	Description
3-0172	Single Stag
3-0174	Two Stage



Plugs

Part # Description
17-0049 1/4" MPT Industrial
Interchange Style
17-0053 1/4" FPT Industrial
Interchange Style
17-0061 3/8" MPT Industrial

Interchange Style
17-0062 3/8" FPT Industrial
Interchange Style

23-0017 3/8" to 1/4" reducer



Couplers

Part #	Description
17-0043	1/4" MPT Industrial
	Interchange Style
17-0045	1/4" FPT Industrial
	Interchange Style
17-0059	3/8" MPT Industrial
	Interchange Style
17-0060	3/8" FPT Industrial
	Interchange Style



Air Chucks

Part # Description
AT-3001 Dual Foot
AT-3002 Ball Foot
AT-3003 Deluxe Air Inflator



Blow Guns

,	Part #	Description
	AT-3004	Blow gun, standard
		rubber tip
	AT-3005	Blow gun, safety tip
	AT-3007	AT-3005 w/2 ft. extension
	AT-3008	AT-3005 w/3 ft. extension
	AT-3009	AT-3005 w/4 ft. extension



Air Hose

■ 1/4" NPT fittings

Part #	Description
15-0230	3/8" x 50' PVC
15-0231	3/8" x 25' PVC
15-0232	3/8" x 50' Rubber
15-0233	3/8" x 25' Rubber



Regulators

- 1/4" inlet/outlet
- 1/8" gauge port
- 250 psig max inlet/125 psig max outlet pressure

Part # Description 22-0326 Regulator



3/8" inlet/outlet

- ·1/8" gauge port
- 300 psig max inlet/150 psig max outlet pressure

Part # Description 22-0231 Regulator



Gauges

■ 1/8" MPT

Part # Description
22-0257 200 PSI max rating
22-0271 300 PSI max rating



Adapters

Part # Description 24-0146 3/8" x 1/4" 24-0010 3/8" x 3/8"

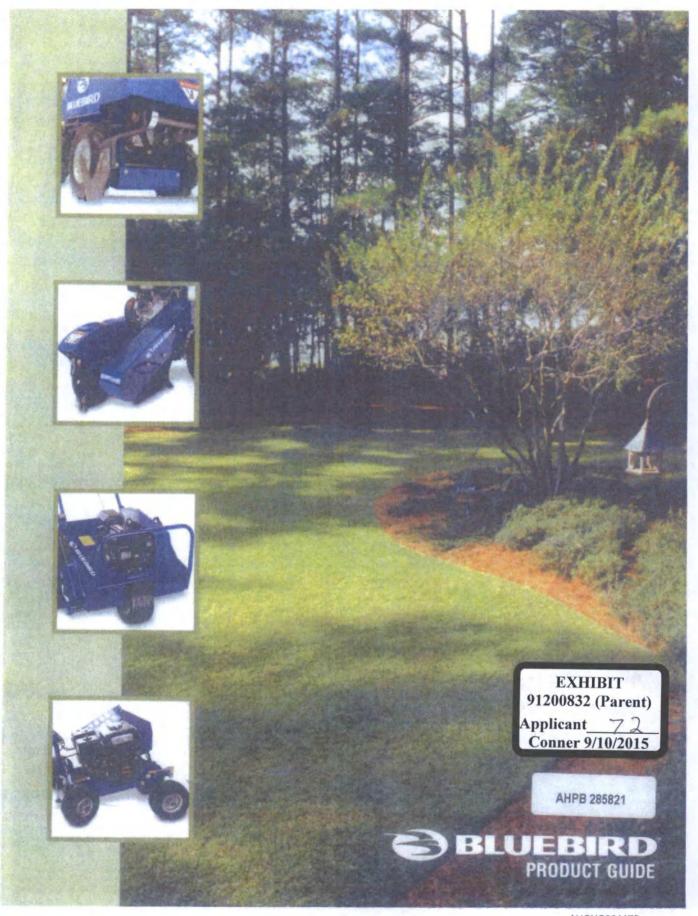


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TRUE TO OUR ROOTS.

A COMMITMENT TO SERVICE. RELIABILITY AND VALUE FOR OVER 40 YEARS

EVERY PRODUCT TELLS A STORY.

Back in 1961, we sold our first BlueBird power rake to a small landscaping company. It was that sale that began our commitment to providing commercial, rental and consumer users the most reliable turf care and power equipment in the industry. We have proven and reinforced this commitment ever since.

As much as we enjoy talking about the hardware, here at BlueBird we're a little uncomfortable trying to put our success into words. Like our users, we'd rather let results do the talking. This philosophy of providing equipment that quietly performs when you need it has contributed to a legacy of dependability, efficiency and value. Simply put, we're true to our roots.

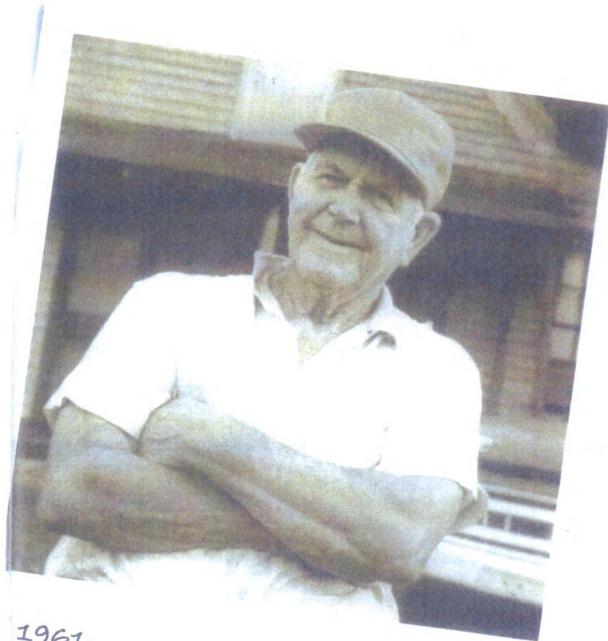
Look for stories throughout our catalog that describe some longtime members of the BlueBird family and the products that help them get the job done. We appreciate your interest in BlueBird products and look forward to hearing your story.

SOLID ADVICE.

BlueBird has long provided its customers with tips and advice that offer suggestions and guidelines, that make managing turf easier and more productive. Look for this logo in this catalog for great tips from your BlueBird experts.







1961-Grandpa Joe buys his first BlueBird Lawn Comber.

AHPB 285823

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BLUEBIRD PRODUCT G



PAGE 6 BEDBUG™ LANDSCAPE EDGER AND CABLELAYER™

For residential or commercial use, the BedBug™ is the only tool you'll need to design beautiful landscapes! Create curved or straight bed edges around the house, pool or trees. The CableLayer™ conveniently lays pet fence or landscape lighting in one fast easy operation. A common platform and interchangeable blades and shields (available in optional kits) allow you to switch between each unit in a matter of minutes.

PAGE 8 AERATORS

One of the most user-friendly lines for both professional and consumer use. BlueBird's Aerators will quickly and easily relieve soil compaction.



PAGE 12 POWER RAKES / SEEDERS

BlueBird's dependable Power Rakes and Seeders have been improving the health and appearance of turf for over 40 years. We provide a comber for every situation.



PAGE 16

NEW SOD CUTTER



PAGE 18 STUMP GRINDER

With BlueBird's Stump Grinder, you can now remove stumps quickly and safely! This well-balanced design offers commercial power and high productivity. BlueBird's Stump Grinder maximizes cutting performance with its 14-inch diameter blade with carbide-tipped teeth, offering a variable cutting depth up to 12 inches.



AHPB 285824

BlueBird Product Guide

ENTS



PAGE 20 LAWN VACUUMS

BlueBird Lawn Vacuums take landscape care to a new level of efficiency, with two different designs and capacities ranging from 27 bushels to 35 bushels.



PAGE 22 ENGINE LIFTS

Our line of knockdown and towable lifts provide the grunt to get your project going, in the shop or on site.

© 2006 BlueBird International. All rights reserved. Continuous dedication to improve our products requires that specifications and designs are subject to change without notice.



A WORD FROM BLUEBIRD.

In addition to designing and producing high quality equipment, BlueBird offers superior customer service. In the U.S., toll-free phone lines are staffed with highly-trained customer service representatives to assist customers with orders, parts shipment, questions or problems.

Listening to customers' concerns has always been a priority at BlueBird. Responsive staff, sufficient inventory and prompt shipment of orders has resulted in a great deal of loyalty from the industry. These qualities allow BlueBird to offer our customers the best service and support.

As BlueBird continues to grow, so do our dreams and aspirations. Our product line up now includes over 40 models. From aerators and seeders to landscape trenchers and stump grinders, BlueBird has the products to help our customers tackle their tough jobs. In Spring 2005, BlueBird moved into a new 274,000 square foot state-of-the-art manufacturing facility. In Beatrice, NE. Our commitment to producing innovative, high quality equipment has never been stronger.



www.bluebirdintl.com

LIVEN UP YOUR LANDSCAPE.

CREATE BEAUTIFUL BED EDGES OR LAY CABLE WITH THE BEDBUG™

IT'S TIME TO SWITCH.

BlueBird continues its commitment to quality landscaping products with the BB550 BedBug™ Landscape Edger and CL550 CableLayer™

The BedBug[™] is the only tool you'll need to design beautiful landscapes. Create seamless edges for beds around the house, pool or trees in a fraction of the time it would take you to do by hand. The CableLayer[™] trenches, buries and backfills pet fence or landscape lighting wire in one fast easy operation.

A common platform and interchangeable blades and shields allow you to switch between the Landscape Edger and CableLayer^{ru} in a mater of minutes. In keeping with the BlueBird tradition, both products feature commercial construction and productivity with user-friendly controls and features,







VERSATILITY

With interchangeable blades and shields, the BedBug™ transforms to make quick work of tiring tasks, like creating landscape beds (1), plastic edging preparation (2), and pet fence or landscape lighting installation (3).





POWERFUL PERFORMANCE

Each unit is powered by a 5.5HP Honda GX engine. The centrifugal clutch supplies reliable power via a heavy duty chain drive.





DEPTH CONTROL

Cutting depth is adjustable from 2 - 4. The handle mounted release lever allows you to conveniently alternate between transport and operating position.

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BEDBUG™ LANDSCAPE EDGER / CABLELAYER™ SPECS

	B9550A	CLS50A
POWER		
ENGINE HP	5.5HP Honda GX	5.5HP Honda GX
DRIVE SYSTEM	Chain Drive	Chain Drive
CLUTCH / PTO	Centrifugal Oil Bath	Centrifugal Oil Bath
PERFORMANCE		
STANDARD ROTOR		1/2" x 4" Trench
BLADE TYPE	Steel / Carbide-Tipped	Steel / Carbide-Tipped
CABLE TYPE	N/A	Flexible, Max. 3/8" Outside Diameter
DEPTH RANGE	Adjustable 2 - 4"	Adjustable 2 - 4"
ASSEMBLY		
HANDLES	Adjustable / Folding	Adjustable / Folding
WHEELS	9 x 3.5-4 Pneumatic Stee	rable Rear
ATTACHMENTS	CableLayer Kit	Bed Shaper Kit
DIMENSIONS		
WEIGHT	140 LBS.	135 LBS

EASY MAINTENANCE

The removable shield provides easy access for maintenance and cleaning without tools. (Patent Pending)





MANEUVERABILITY Unlock the rear wheels for full steering mode to create unique, curved bed shapes or lock the rear viticels to ensure a straight edge every time.

BB550 BEDBUG™



SUPERIOR STABILITY Four smooth tires offer stability, less turl damage and easy clean-up.



COMPACT
A fully adjustable and folding handle allows for easy transport, storage and comfortable working

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A BREATH OF FRESH AIR.

BLUEBIRD AERATORS OFFER THE HIGHEST PRODUCTIVITY WITHOUT DAMAGING THE TURF.

742 LAWN AERATOR

The 742 (25.5" aerating width) Lawn Aerator offers the highest productivity in the market. A 4HP Honda engine with a synchronized clutching system, allows for smooth starts, while the 742's rugged design provides low maintenance and outstanding durability for profitable operation. The patented free-wheeling outer tine system provides unparalleled maneuverability and minimal turf damage around corners and in tight areas. Removable side weights offer optimal soil penetration and balance for easier slope aeration.

530 LAWN AERATOR

Greater productivity, better maneuverability and a user-friendly design are just a few of the outstanding features that make the 530 (19" aerating width) a breeze to operate. BlueBird's patented, free-wheeling tine system allows even inexperienced users to easily aerate corners and tight areas. Operators of the 530 will appreciate its simple design and low maintenance costs. A folding handle, lift handles and semi-pneumatic front tire provide easy transport, while removable side weights offer optimal soil penetration and balance for easier slope aeration. Available with a 4HP Honda or 5.5HP Briggs & Stratton engine.

424 LAWN AERATOR

Homeowners and landscapers who want a powerful aerator in a compact design need not look farther than the 424. The machine is simple to use and features a working width of nearly 18" to help you aerate over 20,000 square feet per hour! The 424 is easy to maneuver, while the built-in lift handles and removable front weights assist in the loading process. The clutch lever is integrated into the folding handle and easy-to-use depth controls give you precise and consistent coring depths up to 3". Available with a 4HP Honda or 5.5HP Briggs & Stratton engine.





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BlueBird Product Guide



742 LAWN AERATOR

TA10 / TA12

The TA10 (36" aerating width) is ideal for commercial areas and large residences, while the TA12 (48" aerating width) model gives you the extra capability to handle just about any situation. Two independent tine rotors with 32 or 40 interchangeable closed spoon 1/2" tines provide superior maneuverability around corners and tight areas. Optional weight containers ensure optimal soil penetration. Tip wheels allow the TA10 and TA12 to easily pass through narrow openings and a rugged design that offers you years of low maintenance productivity.



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UP TO 3" IN DEPTH

HOW AERATION WORKS.

Aeration is the process of mechanically removing cores of turf to improve the flow of air, water and nutrients in dense, compacted soil. Soil compaction, caused by lawn traffic such as walking and mowing, is one of the greatest causes of turf deterioration. When soil is compacted, dirt particles are forced together, reducing the area where roots can grow. Aeration relieves soil compaction by improving the exchange of water and critical nutrients to grass roots.

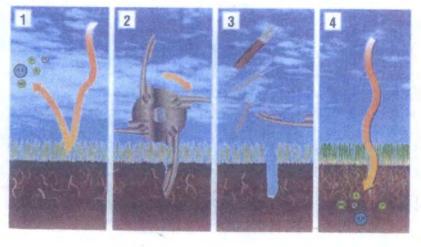
WHY SHOULD I AERATE?

According to Michael H. Hunt, Manager of Tantamount Equipment Rental, Gastonia, NC "Healthier turf means happier customers and an increase in revenue not only from the rentals but from the new customers referred by satisfied older customers."

Chuck Daum, Residential Equipment Coordinator, The Davey Tree Expert Company, Kent, Ohio believes "Aeration is the single most important add-on service that a lawn client should consider. It's a high value, low cost service that benefits both the homeowner and our technicians."

WHEN SHOULD I AERATE?

For optimal effectiveness aeration should be performed at least once annually. Spring (between March and May) and fall (between August and November) are the ideal times to aerate cool season grasses, such as perennial Rye Grass and Kentucky Bluegrass. Warm season grasses, such as Zoysia Grass and Bermuda Grass benefit the most from spring or summer aeration.

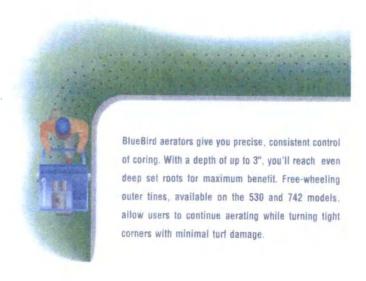


- Adequate amounts of vital turf nutrients including water, oxygen, nitrates. phosphorus, and potassium are unable to reach the roots.
- Aerators relieve soil compaction by removing evenly-spaced cores of turi up to 3" in depth.
- Once the soil is aerated air exchange is improved and the soil can easily absorb water, fertilizer and other nutrients.
- Aeration promotes deeper root growth for a lawn that is lush, healthy and drought resistant.



ACHIEVING THE BEST RESULTS FROM AERATION.

- Water area to be aerated the night before. This will help to soften the soil allowing for maximum core penetration.
- Before beginning, map out any obstructions such as sprinkler heads or drains.
- Cover every inch of the lawn and go over high traffic areas more than once.
- After aerating, water the lawn and apply fertilizer.
 This will promote growth and allow grass to compete with weeds as they grow.



AERATOR SPECS

diam'r.	A24	530	742	TA10	7412
POWER					
ENGINE OPTIONS	4HP Honda	4HP Honda	4HP Honda	Requires 16HP+	Requires 18HP+
	5.5HP Briggs & Stratton	5.5HP Briggs & Stratton		Towing Tractor	Towing Tractor
CLUTCH TYPE	Spring-Loading Belt Idler	Spring-Loading Belt Idler	Spring-Loading Bett Idler	Hand Crank Raise / Lower	Transfer Transfer
DRIVE / Primary	V-Belt to Jack Shaft	V-Belt to Jack Shaft	V-Belt to Jack Shaft	N/A	N/A
ORIVE / Secondary	Permalube Chain-Line Asser	nbly to Front Wheel		N/A	N/A
PERFORMANCE					
ERATING WIDTH	17.5'	19"	25.5	36'	48°
ERATING DEPTH	Up to 3"	Up to 3"	Up to 3°	Up to 3°	Up to 3"
ATTERN	4.4" x 7.8"	3.8" x 4.2"	3.6" x 6.8"	The section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a section in the second section in the section is a section in the section in the section in the section is a section in the section in the section in the section is a section in the section in th	4.8° x 6°
PRODUCTIVITY	20,200 SQ FT / HR	21,900 SQ FT / HR	37,100 SQ FT / HR	Up to 3 Acres / HR	Up to 4 Acres / HR
SSEMBLY					([-]
ONSTRUCTION	Welded Heavy-Gauge Steel				
ORING TINES	24 (.75") Closed Spoon	30 (.75°) Closed Spoon	42 (.75") Closed Spoon	32 (.75") Closed Spoon	40 (75") Closed Spoon
VHEELS	24 (.75°) Closed Spoon		42 (.75") Closed Spoon		40 (75") Closed Spoon
ront / Transport	F: 10" x 6' Semi-Pneumatic	- (i.a.) closes obesit	se (ire) should openin	TR: 10" x 3" Semi-Pneumat	
lear / Tip Up	R: 8" x 2" Solid Rubber			TU: 5' x 1.2' Molded to Wh	
VERALL DIMEN	EIONE				
NOTH DIVIEN	26.5	20.70	700		
ENGTH		29.5	36"	45	58,5
EIGHT	48" (40" Closed)	48" (40" Closed)	50" (40" Closed)		56' with Tow Bar
/EIGHT			52" (28" Closed)		37.1" (28" No Weights)
EIGHT	265 LBS	288 LBS	422 LBS	190 LBS	222 LBS

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RAKE IN THE REVENUE.

BLUEBIRD POWER RAKES OFFER INCREASED VERSATILITY AND PRODUCTIVITY.

THE PR22 IS AS EASY AS 1-2-3



The PR22 operates as a power rake, seeder or power rake with rear catcher bag to collect thatch. The modular design provides the option of changing reels quickly and easily. Units are available with or without a reel assembly. Combining the base platform with any reel and / or kit (seeder or bagger), offers versatility for every

application. The PR22 with a bagger makes dethatching and cleanup simple and efficient. The 5-bushel bag is quickly removed and emptied. Engine options include a 5.5HP Honda and 5.5HP or 8HP Briggs & Stratton. Last but not least, our standard handle folds for easy transport.

PR18

All the great features of the PR22 in a compact 18" wide unit. The PR18 is a dedicated dethatcher available with flail, spring or delta reels. The compact size makes this unit perfect for smaller jobs and a breeze to transport.



D110 🔼

One hundred counter-rotating spring tines over a 38" width make this towable comber extremely efficient. A lift handle engages the spring tine reel which is chain driven by a 5.5HP Briggs & Stratton or 5.5HP Honda engine. The D110 makes short work of large yards, commercial or institutional lawns, golf courses and playing fields.

SPECIALIZED BLADES

Specialized blades for the PR22 change out easily and give you the optimal set-up to tackle any sort of thatch you might encounter.





PR22 POWER RAKE



FLAIL BLADE REEL

These free-swinging stall blades efficiently remove matted thatch with centrifugal force. This design provides excellent thatch removal and reliability proven over ready four decades in the demanding rental equipment environment.



DELTA BLADE REEL

The 12-gauge austempered steel blades have a unique angled position and beveled cutting edges that cut slits in the ground for dethatching, overseeding or secating slopes and terraces, ideal for thinning running-stem grasses like Sermuda and St. Augustine.



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SEEDING IS BELIEVING.

BLUEBIRD SEEDERS MAKE TURF RENOVATION SIMPLE AND EASY.

S22 🔼

The S22 Seeder is well balanced and portable thanks to the placement of the seed hopper and its folding handle. The 30 ib capacity polymer hopper features a site window and is mounted at the rear to ensure easier maneuverability and minimal seed damage during overseeding. The seed gate is adjustable to accommodate a broad range of grass seed









SEEDER

SPRING TINES

Efficiently removes thatch from wellmanicured lawns. In addition, individual BlueBird spring tines can be quickly replaced without removing the reel assembly.



ADJUSTABLE HANDLE

Every BlueBird power rake and seeder has an adjustable handle allowing for three different operator heights as well as lolding for easy transportation and storage.



DEPTH CONTROL

Simplified control lever adjusts easily to seven preset depths to help maintain consistent depth while power raking and seeding.

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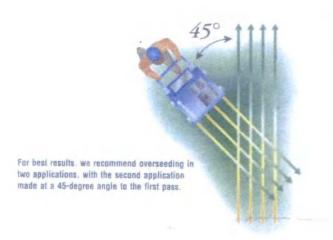
RESTORE LAWNS BY OVERSEEDING.

Lawns that have thinning or bare patches can be restored by overseeding. For best results, we recommend overseeding in two applications, with the second application made at a 45-degree angle to the first pass. You will notice a distinct crosshatch pattern in the effected soil as the BlueBird's delta reel blades virtually "plow" precisely aligned rows of seeds into the turf beneath topsoil.





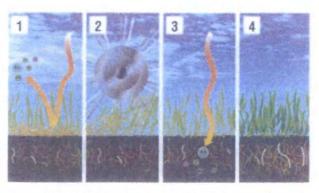




DETHATCHING WITH POWER RAKES.

A healthy lawn requires adequate water, an exchange of oxygen and nutrients and a level of microbial activity in its soil. A thatch layer (an accumulation of roots, crowns and grass clippings which creates a dense mat of vegetation at the soil level) acts as an insulator, keeping soil temperatures low and helping to retain moisture. However, when thatch build-up exceeds 1/2 inch, it can prevent the exchange of water and vital nutrients from the atmosphere to the soil, decreasing the turf's ability to thrive and fight disease and dehydration.

Dethatching, also known as as combing or power raking, is a process that removes unwanted thatch. It's recommended to dethatch in early spring or late fall to allow the lawn a better chance of recovery after combing. It is also important to insure that the blades of your comber are not set too deeply.



- Thatch is a dense mat of roots, stems and grass clippings that accumulates between the soil and growing blades of grass.
- Combing with flail blades, delta reel blades or spring tines will effectively remove thatch buildup.
- With thatch removed, air, water, nutrients, herbicides and pesticides can do their job. Turl becomes healthier and more resistant to insect damage and disease.
- Dethalching at regular intervals promotes denser growth and ensures you'll have a vibrant lawn.



POWER RAKE SPECS

PR16 POWER ENGINE OPTIONS 5.5HP Honda 5.5HP Honda 5.5HP Briggs & Stratton 5.5HP Briggs & Stratton 8HP Briggs & Stratton Handle Mounted Bail with Automatic Safety Declutching DRIVE MECHANISM Spring-Loaded Belt Tightener Spring-Loaded Belt Tightener

PERFORMANCE

COMBING WIDTH 18"

DEPTH ADJUST. 6 Presets +1" to -1" at .25" Increments plus Transport Height

STANDARD REELS Flail Flail

ASSEMBLY

CONSTRUCTION Welded 10-Gauge Chassis Welded 10-Gauge Chassis Ergonomic w/ Foam Padding Ergonomic w/ Foam Padding

DIMENSIONS

WIDTH 26.5° LENGTH 46" Overall

HEIGHT 33" Min. to 39" Max. 33" Min. to 39" Max.

WEIGHT 130 LBS

30.75 46" Overall

5.5HP 141 LBS / 8HP 162 LBS WEIGHT

SEEDER SPECS

POWER

ENGINE OPTIONS 5.5HP Honda / 5.5HP Briggs & Stratton

CONTROL Handle Mounted Bail with Automatic Safety Declutching

DRIVE MECHANISM Spring-Loaded Belt Tightener with Idler Pulley

PERFORMANCE

SEEDING WIDTH 22"

DEPTH ADJUST 6 Presets +1" to -1" at .25" Increments plus Transport Height

Molded Plastic Holds Approximately 30 LBS

SEEDING RATE Adjustable

30 12-Gauge Steel (Delta)

ASSEMBLY

CONSTRUCTION Welded 10-Gauge Chassis HANDLE Ergonomic with Foam Padding

DIMENSIONS

WIDTH 30.75 LENGTH 46" Overall

HEIGHT 33" Min. to 39" Max.

ACCESSORIES

OPTIONAL Delta Kit, Spring Tine Kit, Delta Kit, Spring Tine Kit, Flail Kit Flail Kit, Seeder Kit, Bagger Kit

TOWABLE COMBER SPECS

POWER

ENGINE OPTIONS 5.5HP Honda / 5.5HP Briggs & Stratton

Lift Handle DRIVE MECHANISM Chain Drive 6:1

PERFORMANCE

COMBING WIDTH 38"

DEPTH ADJUST .25" Factory Preset

STANDARD REEL Spring Tines

ASSEMBLY

CONSTRUCTION Welded 10-Gauge Chassis

HANDLE

DIMENSIONS

WIDTH 49.5 40" HEIGHT 41" WEIGHT 135 LBS



TRUE TO OUR ROOTS.

Lindsey's father started his equipment rental outlet in the early '70s. When she inherited the business, his only advice was, "Keep BlueBird!" "The BlueBird rakes and seeders have always made money for us," says Lindsey, "Their maintenance downtime is minimal and the customers almost never have problems operating them."

www.bluebirdintl.com

WE'VE CUT TO THE CHASE.

BLUEBIRD'S NEW SOD CUTTER REDEFINES SIMPLICITY.

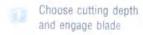
SMOOTH AND STABLE.



Whether you are preparing for a new landscape bed, clearing for a new sidewalk or driveway, or tackling home improvement projects

that require temporarily removing sod, BlueBird's new 18° Sod Cutter is designed to make even the toughest job quick and easy. The SC550 features five-speed gear selection including two cutting speeds, two transport speeds, and reverse plus four wheel drive for improved traction and stability. The pistol style handle arrangement increases operator comfort, while the new easy blade engage handle significantly reduces the effort required to lower the blade into the ground. The simplistic design also makes service and maintenance easier with fewer parts. It's sod cutting made simple!

EASY AS 1 - 2 - 3









SIMPLE DESIGN

Engineered with fewer parts for simplified service and maintenance, the SC550 features a 5.5HP Honda engine and oil bath with centrifugal clutch.



INNOVATION



Automatically down shifts to restrict cutting in transport speeds, reducing stress on the drive system. (Patent Pending):



CONVENIENCE

Simplified depth setting arrangement adjusts quickly and easily up to 2.5".



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SC550 SOD CUTTER

SOD CUTTER SPECS

SU551

POWER

ENGINE HP 5.5HP Honda; Oil Bath with Centrifugal Clutch

TRANSMISSION 5 Speeds, 2 Cutting Speeds, 2 Transport, 1 Power Reverse

PERFORMANCE

BLADE WIDTH 18

CUT DEPTH Up to 2.5'

PRODUCTIVITY Low Gear 15,600 SQ FT / HR; High Gear 20,250 SQ FT / HR

ASSEMBLY

CONSTRUCTION Welded 7-Gauge Steel Frame

WHEELS 10' Semi-Pneumatic V-Tractor Tread

BEARINGS Permalube Sealed

DIMENSIONS

WIDTH 24° LENGTH 54°

HEIGHT 36

WEIGHT 328 LBS

SHIPPING WEIGHT 367 LBS



The BlueBird SC550 can increase your productivity up to 60% more than the competition. Get more done in less time.

COMFORT

Rubber isolated handle reduces vibration to the operator.



DURABILITY

Lightweight aluminum plate arms reduce vibration and feature captured maintenance free ball bearings.



PERFORMANCE

The steep angled front edge of the blade cuts crawling grasses with ease.

www.bluebirdintl.com

GET BACK TO THE GRIND.

BLUEBIRD'S STUMP GRINDER QUICKLY AND SAFELY REMOVES STUMPS.

WELL-BALANCED DESIGN.

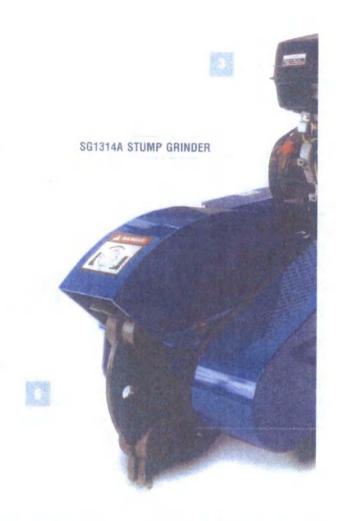


With BlueBird's SG1314A Stump Grinder, you can now remove stumps quickly and safely! This well-balanced design offers commercial power and high productivity.

BlueBird's Stump Grinder maximizes cutting performance with its 14" diameter blade with carbide-tipped teeth, offering a variable cutting depth up to 12".

Operator fatigue is reduced with an ergonomic handle that is adjustable to four height positions to ensure operator comfort and a safe stance during all stages of stump removal. The compact design and clean sight lines of the Stump Grinder make it easy to maneuver through narrow gates and other tight areas.

Two user-friendly lift handles on each side of the unit allow two people to easily lift the unit into mini vans, trucks, and large SUVs.





CONTROL

Convenient controls and oversized handle give positive control.



USER-FRIENDLY
Handle height and brake
engagement levers are
simple and easily
accessible



PERFORMANCE
13HP Handa GX engine
delivers reliable power
via a heavy-duty NORAM**
centrifugal clutch.

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BlueBird Product Guide







OPERATOR COMFORT

An innovative adjustable handle enables the operator to adjust the angle of the handle to maintain a comfortable and safe stance throughout the stump grinding job

STUMP GRINDER SPECS

POWER

ENGINE HP AIR FILTER BRAKE

13HP Honda Cyclone Air Filter

Hayes Disc Brake; Lever Activated

PERFORMANCE

CUT DEPTH

Variable; up to 12° with Adjustable Handle NORAM™ Automatic Centrifugal Clutch

DRIVE BELT

Matched Set of V-belts

ASSEMBLY

CONSTRUCTION WHEELS

Welded 7-Gauge Steel Frame

CUTTER WHEEL

12" Diameter Pneumatic Knobby Tread (4.10" x 6" 2-Ply)

Vertical 14" x 3/8" Disk; 8 Tungsten Carbide-Tipped Teeth with Pockets

BEARINGS

Cast Flange Greaseable

DIMENSIONS

WIDTH 27

LENGTH HEIGHT

62-73" based on handle position

27-45" based on handle position

WEIGHT

SHIPPING WEIGHT 350 LBS

252 LBS



EASY TRANSPORT Two lift handles on each side allow two people to lift the unit into truck or SUV.



DURABILITY Heavy-duty greaseable pillow block bearings support the cutter wheel.



PRODUCTIVITY The 14' cutting wheel features 8 easily replaceable Tungsten carbide-tipped teeth.

www.bluebirdintl.com

KEEPING IT CLEAN.

A NEW LEVEL OF EFFICIENCY.



BlueBird Lawn Vacuums take landscape care to a new level of efficiency, with two different designs and capacities ranging from 27 bushels to 35 bushels.

V533 CLAMSHELL

The V533 clamshell lawn vacuum efficiently removes and compacts grass clippings, thatch, leaves and other yard waste. The debris is collected in a lightweight polyethylene, 27-bushel bin that features a tapered bottom for quick and thorough dumping



V46 / V86 🔼

The tractor-pulled units are ideal for year-round collection seasonal cleanup, featuring a rugged steel construction with an enclosed trailer and single pin hitch for easy connection. A full-length tunnel vent helps prevent clogging. The 28-bushel V46 works with mowing decks up to 48" and is suited for one to five acres. The 35-bushel V86 is for over two acres.

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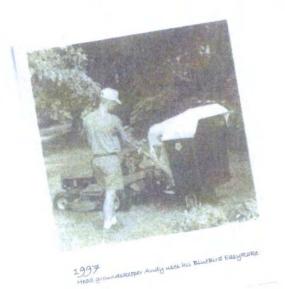
UNIVERSAL BOOT

The Universal Boot is made of extremely durable high impact polyethylene and is fitted with a metal guard on its side to protect against wear and damage. Cutting is required to match the Universal Boot to most mower decks.



EXTENSION HOSE

The Model 200 Extension Hose is ideal for remote pickup in tight areas as well as around flowerbeds, bushes and trees. The hose is 12 long and matches up to a 6" or 7" diameter hose, depending on model



TRUE TO OUR ROOTS.

As a head groundskeeper at a municipal golf course, Andy worried when he heard that EasyRake was being purchased by BlueBird. He didn't need to, though "Not only is our older equipment still running great," says Andy, "but our new 533s have got a lot more power and capacity – and they're just as dependable."

LAWN VACUUM SPECS

POWER ENGINE OPTIONS	5HP Briggs & Stratton 5HP Briggs & Stratton-I/P	5HP Briggs & Stratton 5HP Briggs & Stratton-I/P	8HP Briggs & Stratton-IA
PERFORMANCE BUSHEL CAPACITY MOWER DECK HOSE DIAMETER	27 (34 Cu.Ft.) Up to 48° 6° PVC / Nitrile	28 (35 Cu.Ft.) Up to 48° 6° PVC / Nitrite	35 (44 Cu.Ft.) Between 48"-76" 7" PVC / Nitrile
COTREDIA	(1)(1-11)(4)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)		
COLLECTION BIN DUMP MECHANISM WHEELS	Polyethylene / Steel Frame Foot-Release 16" Floatation	Heavy Gauge Steel Spring-Latch 16" Floatation	Heavy Gauge Steel Spring-Latch 16 Floatation
		TT. T.	
DIMENSIONS SHIPPING WEIGHT	370 LBS	410 LBS	490 LBS

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-

WHEN YOU NEED A LIFT.

THE BLUEBIRD KAYDEE LIFTS ARE ALWAYS READY TO GIVE YOU A HAND.

KAYDEE 1200 / KAYDEE 1500.



Backyard shop, warehouse, or construction site, the Kaydee knockdown lift goes wherever the job is. It can be quickly taken apart,

moved and reassembled

Every component is sized for a precision fit ensuring lasting stability and ease of assembly. The boom hook rotates 360 degrees, making it easy to pick up, load and reposition objects. Interchangeable parts offer you maximum versatility for a broad range of applications, any Kaydee Lift can be used with an engine sling, or converted into a van lift with the short column post.



KADDY 🖾

For extra ease and portability, all parts of the Kaydee lifts can be moved in the wheeled Kaddy, which is designed for easy handling by one person, and narrow enough to fit through a 20" opening.



KAYDEE LIFT SPECS

CAPACITY		
WEIGHT	1200 LBS	1500 LBS
LIFTING HEIGHT	31.5° Min / 99.5° Max	37" Min / 91.5" Max
LIFTING REACH	47.5° Min / 62.375° Max	35.75" Min / 50.625" Max
HEIGHT	47 1/8" Short Column Post 65 1/2" Reg. Column Post	47 1/8" Short Column Post 65 1/2" Reg. Column Post
DIMENSIONS	47 1/8" Short Column Post	47 1/8° Short Column Post
WIDTH	1.77 4.99	40 1/2"
LENGTH	74 1/2"	74 1/2"
SHIPPING		
SHIPPING WEIGHT	294 LBS	279 LBS

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STAY WITHIN REACH.

BLUEBIRD TIP TOWS ARE THE PERFECT SOLUTION FOR LONG REACH AND HIGH LIFT.

TIP TOW 10.

The BlueBird Tip Tow 10 is the perfect solution for situations where you need a long reach and a high lift. The dual boom hooks can be raised to a full 10 feet. This makes it the ideal piece of equipment for working on tall 4x4s or SUVs, trailered boat engines and even airplanes.

The unique gooseneck design lets the user reach into the most confining engine compartment without touching the surrounding structure, while a larger towing wheel set ensures ultimate stability.

TIP TOW 3000 / TIP TOW II.

Designed for heavier applications, the Tip Tow 3000 and Tip Tow II are engineered for perfect balance and easy towing with couplers for a standard 2" or 2 1/8" ball. The Tip Tow 3000 can lift up to 3000 pounds, while the Tip Tow II can support 1000 pounds on its outer hook, 1500 pounds on the inner.





TRUE TO OUR ROOTS.

Rick's station house has depended on their BlueBird lift to do the grunt work for years. "Moving the hoses and other heavy gear between engines and out for cleaning used to take a bunch of us over an Tour or two every day. Now I can do the same thing myself in the same amount of time - plus I can norrow it when I need to work on my truck.

TIP TOW SPECS

CAPACITY		*	
WEIGHT TOTAL	3500 LBS	3000 LBS	2500 LBS
OUT / IN HOOKS	1500 LBS / 2000 LBS	N/A	1000 LBS / 1500 LBS
LIFTING HEIGHT	27" Min / 120" Max	33" Min / 100" Max	28" Min / 100.5" Max
LIFTING REACH	60" Min / 73" Max	55" Min / 55" Max	66.75" Min / 49" Max
DIMENSIONS			
HEIGHT	84" Min / 124" Max	67.5° Min / 73.75° Max	62.5° Min / 69° Max
WIDTH / LENGTH	66" / 96"	52.5" / 75.75"	52" / 82.5"
TOWING WHEELS	5.7 x 8"	4.8 x 8°	4.8 x 8"
SHIPPING			
SHIPPING WEIGHT	530 1 85	265 1 00	307 LBS

www.bluebirdintl.com



401 N. Commerce St. • Beatrice, NE 68310 (P) 800-808-BIRD • (F) 800-254-BIRD

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113459

AHPB 285844

AHGXC001198

Honda Black (Matte)

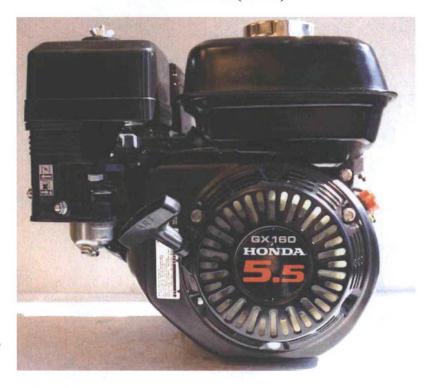


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Honda Blue 5.5 HP

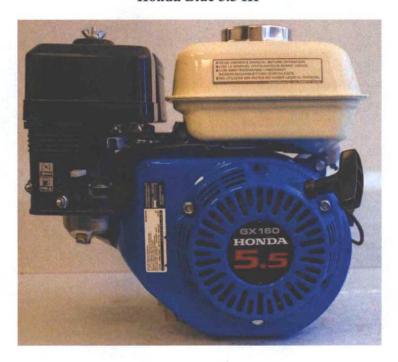


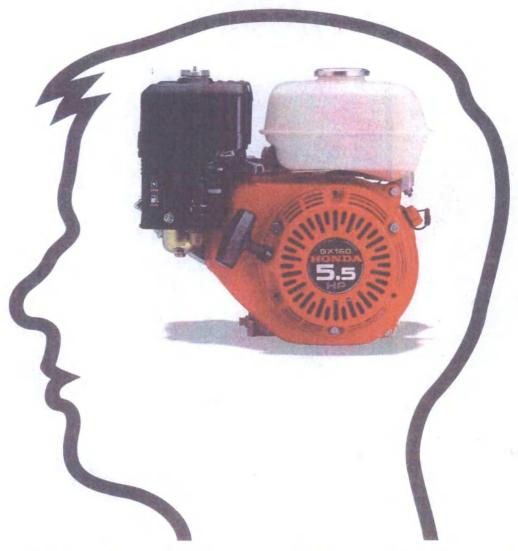
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Honda Yellow



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It's the first thing a good foreman thinks of.

You've got more than enough to think about on get to work quickly. They're also fuel efficient. In fact, the job without worrying about choosing an engine, our legendary OHV design is so efficient that we only

Luckily, there's Honda.

For years, the Honda Overhead Valve general purpose engine has been an industry standard for reliability and durability. To thousands of people, on thousands of construction sites.

Honda engines start easily, so you

had to make minor modifications to meet the current California and EPA emissions standards.

So if you're in the market for an engine that'll get the job done, there's really not much to think about.

Just make sure vou get a Honda.

Power with a Clear Advantage.

Call 1-800-426-7701 for more information.

@1996 American Honda Motor Co., Inc. For optimum performance and safety, please read the owner's manual before operating your Honda Power Equipment.

For information circle 42

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AHPB 283922

AHGXC001548



THERE ARE 13 THINGS WRONG WITH THIS PICTURE AND ONE THING THAT'S VERY RIGHT.

Ask any contractor. They'll tell you nothing makes more sense on the job like equipment powered by Honda engines. They're incredibly tough, reliable and quiet. With Honda engines, all seems right with the world.

Speaking of right and uvong, can you find the 13 things out-of-whack in the picture? Go to www.onter.bonda.com and give us your answers. If you find all 13, we'll send you a Honda cap for your astate head. See our site for details.

Fair-legals, may is, in and 1.6 to the Decempor cased, parametr from this product onto be finest what provides growing \$1.1 to the cases as a recognitive force to long 3 May 5 from \$1.2 to the cases.

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800.426.7701 www.enter.honda.com

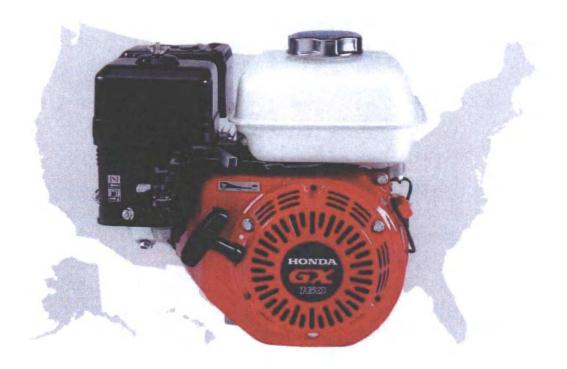


HONDA ENGINES

Built like no other.

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Applicant 79 Conner 9/10/2015 AHGX0101285



One Engine for All.

No matter which Honda small engine you choose, it's certified for all 50 states. Thanks to our advanced engine technology, with only minor modifications, Honda certifies to the stringent California and existing EPA Phase 2 emission requirements. This continues to reflect Honda's forward thinking with regard to emission regulations, air quality and the needs of our customers. All 50 states, all sorts of power equipment and one engine that makes sense for all. www.honda.com



Built like no other.

G2007 A musican Horda Motox Go. Inc. For optimism partformance and solidy, plante need the contests manual bufess operating your Horda Power Equi present

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A three-year warranty on a Honda is totally unnecessary.



But then, maybe that's the point.



Introducing a three-year limited warranty on Honda GX Series Engines.' You and your customers always knew they were worry free, but now we've put it in writing. Visit your nearest dealer or go online at honda.com for complete warranty details.

HONDA ENGINES

"Warranty expires to oil Honds 3X Series Engines, 100cc or leriger purchased at retail or put into rental behavior after January 1st. 2009, Warranty excludes the Honds (3X/160 mode). See full settranty details at Honds.com. #2009 Annercan Honds Motor Co. Built like no other.

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Honda's Redesigned GX Engines. The Foundation Of Success.

With the newly-redesigned mid-range GX120, GX160, and GX200 to go along with the recently-introduced GX240, GX270, GX340 and GX390, the second generation of Honda GX Series Engines is now complete.

Featuring improved performance, lighter weight, great fuel economy and meeting EPA Phase 3 emission requirements without a performance-inhibiting catalyst, this is the winning lineup. Add to that Honda's 3-Year Warranty' and unsurpassed reputation for reliability and it's clear how Honda can help your business.

So come visit us at Booth 16607 and find out more concrete reasons to choose Honda.





engines.honda.com

Marrantly applies to all Honds GX Series Engines. 100cc or larger purchased at relative put into restal service since January 1, 2008 Merrantly excludes the Honds GXV-160 model. See full severantly details at Honds.com. For optimum genformance and sately, please read the owner's marrual before operating your Honds Power Equipment. GXD11 American Honds Motor Co.



Built like no other.



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Confidential Applicant Exhibits 84-86



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Confidential Applicant Exhibit 88

United States Patent [19]

Nakamura

[11] Patent Number: Des. 282,071
[45] Date of Patent: ** Jan. 7, 1986

[54]	INTERNAL COMBUSTION ENGINE		
[75]	Inventor:	Tetsuo Nakamura, Saitama, Japan	
[73]	Assignee:	Honda Giken Kogyo Kabushiki Kaisha, Tokyo, Japan	
[**]	Term:	14 Years	
[21]	Appl. No	.: 478,941	
[22]	Filed:	Mar, 25, 1983	
[30]	Fore	ign Application Priority Data	
Oc	t. 20, 1982 [JP] Japan 57-476	91
		D15,	
1581	Field of S	earch D15/1; 123/56 B, 56 B	C,
	123/5	6 BA, 41.66, 41.67, 41.7, 195 G, 195 195 R, 198	В,
[56]		References Cited	
	U.S.	PATENT DOCUMENTS	
		/1978 Stevens	
D	. 257,844 1	/1981 Stevens D15	/1

D. 276,160 10/1984 Tuggle et al. DI5/I

OTHER PUBLICATIONS

Implement & Tractor, 2-21-79, p. 37, Kawasaki Engine.
Implement & Tractor, 3-21-79, p. 11, Kawasaki Engine.

Primary Examiner—Wallace R. Burke

Primary Examiner—Wallace R. Burke
Assistant Examiner—Lynn Wilder
Attorney, Agent, or Firm—Sughruc, Mion, Zinn,
Macpeak & Seas

7] CLAIM

The ornamental design for an internal combustion engine, as shown.

DESCRIPTION

FIG. 1 is a front, top and left side perspective view of an internal combustion engine showing my new design; FIG. 2 is a left side elevational view thereof; FIG. 3 is a front elevational view thereof; FIG. 4 is a rear elevational view thereof; FIG. 5 is a top plan view thereof; FIG. 6 is a right side elevational view thereof; and FIG. 7 is a bottom plan view thereof.

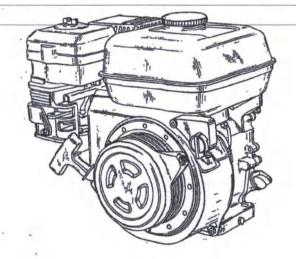


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FIG. 1

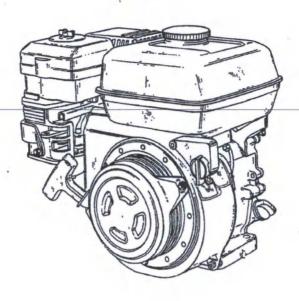


FIG. 2

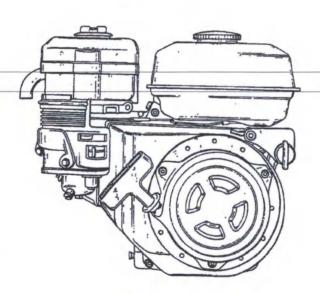


FIG. 3

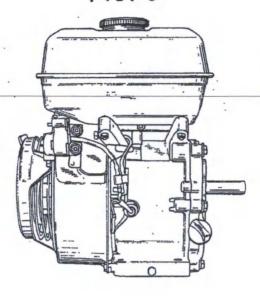


FIG. 4

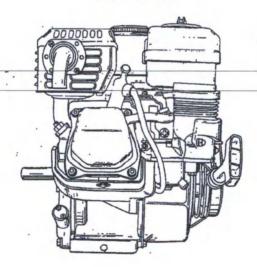


FIG. 5

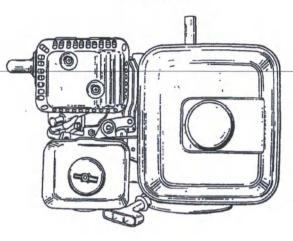


FIG. 6

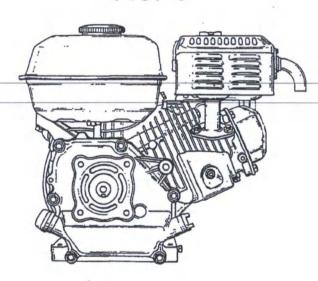
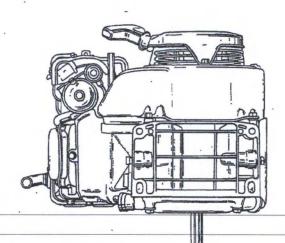


FIG. 7



Confidential Applicant Exhibit 90

Case: 1:03-cv-00668-MPM Doc #: 1180 Filed: 10/23/07 1 of 4 PageID #: 26067

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF MISSISSIPPI EASTERN DIVISION

POWERTRAIN, INC., et al.,	
Plaintiffs,	
v.	
AMERICAN HONDA MOTOR CO., INC.,	
Defendant.	Civil Action No.: 1:03CV668MD
AMERICAN HONDA MOTOR Co., INC.,	
Counterclaimant,)
v.)
POWERTRAIN, INC., et al.,))
Counterdefendants.))

PERMANENT INJUNCTION

This case came on for trial before a jury and this Court, Michael P. Mills, Chief U.S. District Judge, presiding. Based on the jury verdict dated August 13, 2007, this Court has previously ordered, adjudged, and decreed, by Order and Judgment dated August 27, 2007, the following:

- (a) that the trade dress of American Honda Motor Co., Inc.'s ("American Honda's") GX series engines is protectable (i.e., that the trade dress is non-functional and has acquired secondary meaning);
- (b) that PowerTrain, Inc., Wood Sales Co., Inc., Tool Mart, Inc. and Best Machinery and Electrical Co., Inc. have all directly infringed on American Honda's trade dress; and
- (c) that Joyce Ma has contributorily infringed on Honda's trade dress.

The Court further finds that there are certain parties against whom a default judgment has been entered, namely China National Electronics Import and Export Zhejiang Company, Shaoxing Tongyong Engine Mading Company, Inc., Xing Yue Group, and Zhejiang Ever Fine Electric Appliance Group, Ltd., as set forth in this Court's order of July 12, 2007 [1069]. Based on their default, and further based on the findings of the jury,

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED that Defendants PowerTrain, Inc., Wood Sales Co., Inc., Tool Mart, Inc. Best Machinery and Electrical Co., Inc., Joyce Ma, China National Electronics Import and Export Zhejiang Company, Shaoxing Tongyong Engine Mading Company, Inc., Xing Yue Group, and Zhejiang Ever Fine Electric Appliance Group, Ltd., and their respective officers, directors, employees, agents, attorneys, and all persons acting for or on behalf of them, whether acting individually or in concert (collectively "Defendants") are hereby permanently enjoined from:

1. Using, designing, manufacturing, selling, offering for sale, or importing the engines, or any product incorporating such engines, as shown on the photographs attached as Exhibit A sheets 1-47 and 50-56, which utilize the fuel tank design, muffler design, valve cover design, fan cover design, cooling fins' design, air cleaner cover design, raised circle on air cleaner cover, wing nut on air cleaner cover, carburetor cover, plastic ribs on carburetor cover, bolt location on carburetor cover, oil fill cap style and color, fuel tank mounts, oil alert system, and/or engine base ribbing design of the trade dress of the Honda

GX series engines, including the overall appearance of Honda's GX series engines, as shown on the photographs attached as Exhibit B, or any such item or component substantially or confusingly similar thereto, including but not limited to all 4 to 13 HP PowerTrain engines (or products incorporating such engines) as in existence on the day on which judgment was entered in this case (August 27, 2007) ["Infringing Items"]; and

- 2. Without limiting the foregoing, using, manufacturing, selling, offering for sale, or importing any Infringing Items in the form in which such Infringing Items existed on or before August 27, 2007; and
- 3. Defendants shall file a report, within 30 days of the date of this Permanent Injunction, describing all its steps taken to ensure compliance with the provisions of paragraphs 1 and 2 above; and
- 4. This Court retains authority, under 15 U.S.C. § 1118, to ensure compliance with this order, and to grant any further and appropriate relief, including, but not limited to consideration of whether any alternative engine designs to be presented by PowerTrain or any other Defendant are permissible under the Order and Judgment dated August 27, 2007, as may be required on this record; and
- 5. The parties have agreed that any appeal times or deadlines that might otherwise apply to this Order are tolled, pending the trial of the damages portion of this matter. The parties further agree not to appeal this permanent injunction until after the trial of the damages portion of this matter.

Case: 1:03-cv-00668-MPM Doc #: 1180 Filed: 10/23/07 4 of 4 PageID #: 26070

ORDERED AND ADJUDGED this 23rd day of October, 2007.

/s/ Michael P. Mills
CHIEF JUDGE
UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF
MISSISSIPPI

Confidential Applicant Exhibits 92 - 103



EXHIBIT
91200832 (Parent)
Applicant /64
Conner 9/10/2015



EXHIBIT
91200832 (Parent)
Applicant 5
Conner 9/10/2015

HONDA ENGINES

CASE NO. CV05-8879 SJO	(VBKx)			
American Honda Motor Co., Inc.				
VS. The Pep Boys - Manny, Moe, & Jack, et al.				
PLAINTIFF'S EXHIBIT 8	57			
DATE	IDEN.			
DATE	EVID			
BY	puty Clark			
AO 386				



AHPB 283732

AHGXC001892



2005 Full Line Press Kit Thumbnail Photos

GX SERIES ENGINES



GX25 tr

















3X270 ft



































GXV140 red tr

3XV810.6

GXV620.88

GXV67016

iGX ENGINES







GX side view trf



GX side view 21f



GX side view 3 tif



GC SERIES ENGINES







GC 160 N



GC 190 til



GCV outaway (if



GCV160 8



GCV190.pg



GCV530.tit

GS SERIES ENGINES



GS190,pg



GS190 outaway jpg



GSV190 front.jpg



GSV190 side view jpg

MCHP PHOTOS



Complete MCHP system.jpg



cutaway jpg



Honda MCHP schematic.pg



Honda MCHP schematic 2 jpg



testing.jpg



Honda MCHP testing 2 pg



AHPB 283733

Honda MCHP unit ipg



COMPANY LOGOS



Honda Engines color logo ipg





Honda logo 186 jpg

1993 Advertising



EXHIBIT

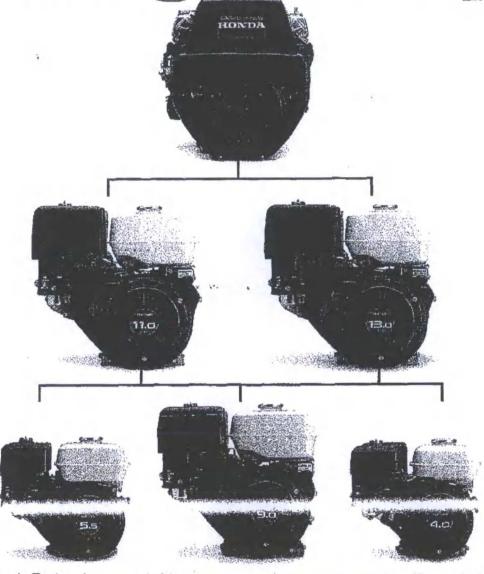
H - 54

HONDA 770



AHGX0084200

Honda announces a change at the top.



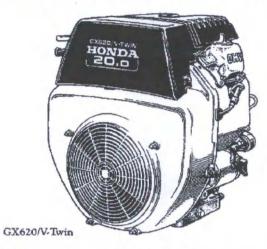
Honda Engines has expanded its power

structure with the addition of two new OHV engines, the 18 and 20 hp V-Twins. Both are designed with the quality and reliability @ 1993 American Honda Motor Co., Inc. For optimum performance and safety, please read the owner's manual before operating your Honda Power Equipment.

you've come to expect from Honda. And these engines already meet the 1994

California Air Resources Board standards. For your nearest dis-S tributor, call 1-800-426-7701.

More information? Write 56 on reply card.



Honda Engines has expanded its power structure with the addition of two new OHV engines, the 18 and 20 hp V-Twins. Both are designed to deliver more horsepower with the quality and reliability you've come to expect from Honda. And these engines already meet the 1994

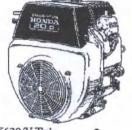
(DEALER IMPRINT)

CARB* standards.

 $2 \text{ col.} \times 7$

Honda's new general purpose engines offer you a choice for every job. You get the power you need with horizontal and vertical shaft models ranging from 2.2 to 20 horsepower. Every Honda engine uses gaskets that are asbestos free. And they meet 1994 CARB* standards. So not only do you get a powerful alternative, it's one you can rely on.





GX620/V-Twin



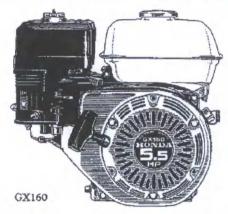


(DEALER IMPRINT)

GXV390

 $2 \text{ col.} \times 7$

POWER YOU WANT. RELIABILITY YOU NEED.



Honda's new general purpose engines offer you a choice for every job. Get the power you need with horizontal and vertical shaft models ranging from 2.2 to 20 horsepower. Every Honda engine uses gaskets that are asbestos free. And they meet 1994 CARB* standards. So not only do you get a powerful alternative, it's one you can rely on.

(DEALER IMPRINT)

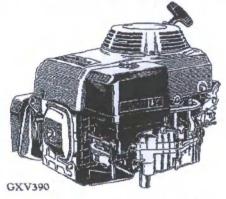
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2 col. × 7

WALUE ADDED.

HONDA'S GOT THE POWER TO MAKE IT WORK

HONDA. THE WORK FORCE.



Honda's new general purpose engines offer you a choice for every job. With horizontal and vertical shaft models ranging from 2.2 to 20 horsepower, you get the power you need. Every Honda engine uses gaskets that are asbestos free. And they meet 1994 CARB* standards. So not only can you rely on them to work harder, you can rely on them to last.

(DEALER IMPRINT)

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WORK HORSES FROM HONDA.

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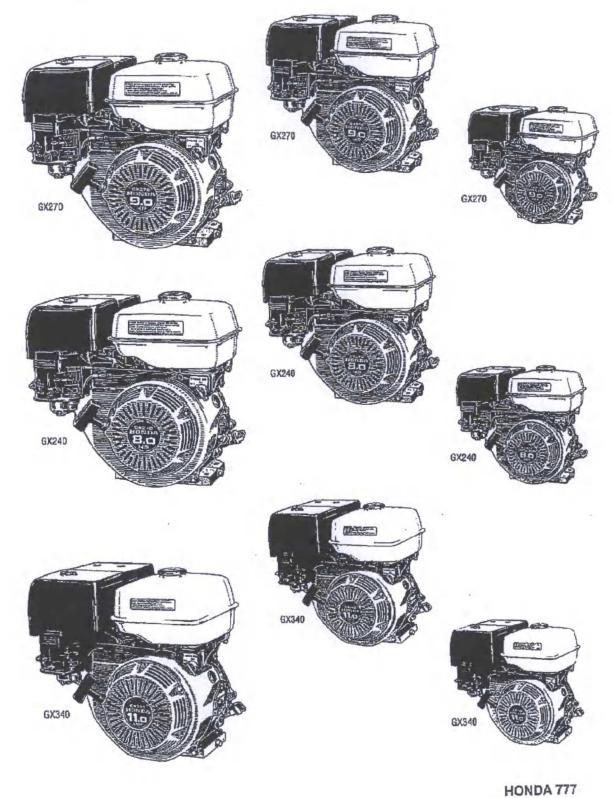
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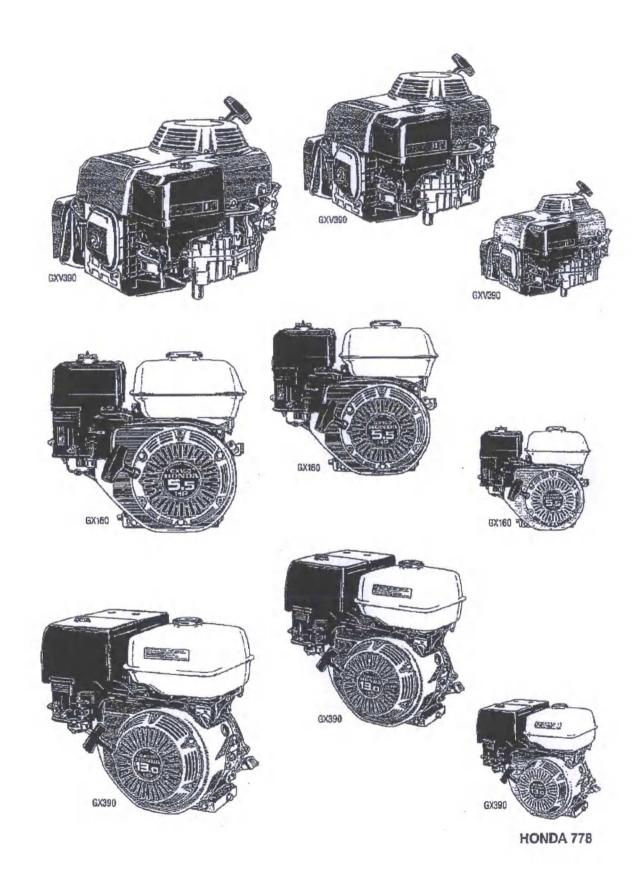
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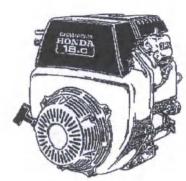
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HONDA ENGINES





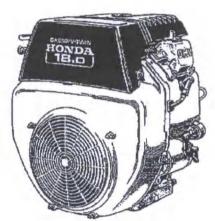




GX610/V-TWIN



BX610/Y-TWIN



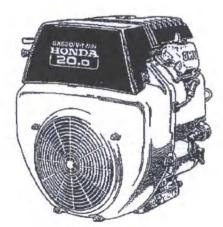
GX610/V-TWIN



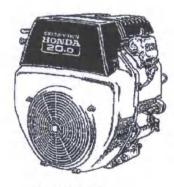
GX610/V-TWIN



GX610/V-TWIN



GX620/V-TWIN



GX620/V-TWIN



GX620/V-TWIN

HONDA 779

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Product Features

- Product Features

 HONDA GX Commercial Series Engine Starts Easy, Runs Smoothly, and Delivers High Output

 Direct Drive Engine & Pump for Streamlined Power Transmission from Engine to Pump
 Triplex Pump Design with Ceramic Pistons and Thermal Relief Valve

 Welded Construction, 1-1/4" Tubular Steel with Steel Engine Plate and Solid Steel 5/8" Axle

 5/16" x 25" Non-marring Hose with Easy Connectors for No Tools Assembly

 5 Quick Connect nozzles (0". 15", 25", 40", & Soep) make swiching applications easy and fast!

 Downstream Detergent Injection System

PECS & WARRANTY	QUESTIONS & ANSWERS	USER REVIEWS (2)
Specifications		Warranty Information
Water Pressure	3000PSI	This DEWALT® High Performance Industr with a warranty package that Includes: • 3 Year Limited Warranty • 2 Year Limited Warranty • 1 Year Limited Warranty More Information on the general DEWA
Flow Rate	2.5GPM	
Engine Mfgr.	HONDA®	
Pump Brand	FNA	
Wheels	10" Premium Pneumatic	
Pump/Hose Quick Connector	Easy Connectors	
Hose	25' x 5/16" High Pressure Hose	
Hose/Gun Quick Connector	Easy Connectors	
Wand Type	Steel Wand with Quick Connect	
Spray Patterns	0°. 15°, 25°, 40°, & Soap	
Engine Orientation	Horizontal	
Frame	1-1/4" Welded Steel	
Frame Tube Style	Tubular Steel	
Frame Handle Style	Tublar Steel	
Accessory Storage	On Board	
Gun	2 piece	





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PARTS | SERVICES & SUPPORT | BUYING & FINANCING | OUR COMPANY

Home / Home and Workshop Products / Pressure Washers / LP020297



FEATURES & SPECS

GX390, 389cc Honda OHV engine 3,800 psi @ 4.0 gpm Professional grade Triplex Pump with Easy Start 5 Pro-Style spray tips

See All Features

\$999.00° USD

PSI:

List Price:

Model/Part No.: LP020297 3800 389cc

Displacement: Engine:

Honda OHV

See All Specs

LOCATE A DEALER

Specifications

LP020297 Light Duty Cold Water Pressure Washer

The LP020297 Light Duty Cold Water Pressure Washer has a 50 ft. industrial-grade stell reinforced polyurethane hose with quick connects and five Pro-Style tips (0°, 15°, 25°, 40°, and low pressure)

*Manufacturer's suggested price. Taxes, freight, setup, and delivery not included. Equipment, models and prices may vary by dealer, Offers valid in the United States. Prices in U.S. dollars.

Product features subject to change. Please contact your <u>local dealer</u> for more detailed information.

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AMERICA'S LEADING MANUFACTURER

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Cold Water Pressure Washers

Gas-Powered Cold Water

RG: Residential-

Grade, Portable

DD: Light-

Commercial.

Portable, Direct-

Drive

DGA: Aluminum,

Commercial-Grade, Direct-

Drive

DG:

Commercial-

Grade, Portable

Direct-Drive

BG: Portable,

Belt-Drive

KG: Handtruck.

Direct-Drive

BR: Portable

Roll Cage, Belt-

Drive

CD: Handheld

Electric-Powered Cold
Water

Mobile Wash Trailers

Accessories

Detergents

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Customer Service

Product Literature

Shark's DG series is compact but heavy-duty - the most popular direct-drive cold water model

These Shark models are tough gasoline-powered direct-drive cold water machines that deliver cleaning power of up to 3500 PSI. Built on compact sturdy steel frames, each unit features a dependable industrial-grade Honda engine, Kärcher crankcase pump, hose/gun rack, detergent injection, and tubed pneumatic tires. All models are ETL certified



Request a Quote

Product Overview

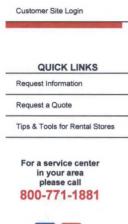
Specifications

Product Literature

PRODUCT OVERVIEW

- · Chrome handles
- Steel frame with powder coat finish
- · Commercial grade Honda GX engine
- Cleaning power up to 3500 PSI
- Industrial direct-drive Kärcher crankcase pump







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Colt FT Garden Tiller

208cc Forward-Rotating Front-Tine Rototiller with Adjustable Tilling Width

\$419.99 In-Stock

Quantity:

1

Add to Cart

Where to buy



Overview

Specifications

Accessories

Parts & Manual

The Colt™ FT garden rototiller features a powerful 208cc Troy-Bilt® OHV 4-cycle engine and patented Bolo® tines that cut through soil with ease, resulting in finely tilled, well-aerated soil. The Bolo curve design allows the tines to cut and dig at an offset angle for groundbreaking while the swept-back angle turns under the soil. With adjustable tilling widths, chain drive transmission and ability to till up to 7" deep, the Colt FT front-tine rototiller is designed for premium garden soil preparation.

Interactive View

Customer Reviews

*** 4.7 out of 5 stars (49 Reviews)

100% 49 of 49 reviewers would recommend this product to a friend.

I bought this model from my local Lowes primarily because it was the size I

started on the very first pull (it has started on the first pull every time I used it so far). I used it on my garden and flower bed areas and it works really well

wanted and they had it in stock. It was relatively easy to assemble and

Write a review

Choose a sort order

~

Easy to use and cuts through hard packed soil

青青青青金

June 11, 2015

Durability

Performance Ease of Use

Ease of

Starting

CBColorado



on hard packed, clay filled soil. It is relatively easy to adjust the height of the (read all my reviews) Location: Littleton, CO, USA tines and guard in the back. So far it has met my needs and has been very Gender: Male reliable. Lot Size: Less than 1/2 acre Was this review helpful to you? Yes (7) No (0) Report inappropriate content Like { 0 Tweet Pinit Durability *** June 4, 2015 Performance My Troy Bilt Tiller Ease of Use Bought it at Lowe's, based partially on discussions with sales personnel. Fase of Brought it home, pulled out the instructions had it together in less than 30 Starting minutes. Put in the oil provided and gassed it up. Set the choke and throttle and pulled the starter rope-fired up the first time. Have used it a lot to till soil Jkell (read all my reviews) up for garden, seeding and putting in blueberries--works great, fires up on Location: Johnston Co. NC first pull--did flood it once and had to wait about 10 minutes and then it fired Gender: Male up on first pull. Have the full line of TB attachments for my gas weedeater so Lot Size: More than 2 acres am a believer! Zone: 7 Was this review helpful to you? Yes (3) No (0) Report inappropriate content Like 0 Tweet Pintt Durability *** May 31, 2015 Performance rear wheels Ease of Use Rear wheels setup is very whooble at times. Adding a second attach point Ease of and larger wheels will make it more stable and easer to handle. Otherwise Starting the tiller is the best I've had. redfish102 (read all my Was this review helpful to you? Yes (3) No (0) reviews) Location: Deltona, FL, USA Report inappropriate content Gender: Male Lot Size: Less than 1/2 acre Like 0 Tweet Pinit Zone: 10 **** Performance May 28, 2015 Ease of Use **New Owner** Ease of I hate buying something that I will use exactly once per year but my >30 yo Starting previous tiller died. Gardenboy (read all my This was reasonably straight forward to assemble. It is heavier than my previous one but pretty standard weight for current tillers Location: Hopkins, MN with appropriate safety covers. I put the tines on the widest setting and it performed well with no difficulty Gender: Male Lot Size: turning over reasonably packed dirt. Greater than 1/2 acre but Aside from weight it maneuvers well and is pretty easy to keep directed in a less than 1 acre straight line. Blades are easy to free from brush. Can't comment about durability given that I only got it last month.... Was this review helpful to you? Yes (5) No (0) Report inappropriate content Like 0

1 <u>2</u> <u>3</u> <u>4</u> <u>5</u> ... <u>10</u> <u>Next</u>

^{† †} The operator's manual posted is for general information and use. To ensure the download of the operator's manual specific to your unit, we require a model and serial number. Click here to enter that information.

[†] Models and pricing may vary by retailer. Please check with your retailer for specific availability and pricing.

^{† *}as rated by engine manufacturer



Bronco CRT Garden Tiller

208cc Counter-Rotating Rear-Tine Rototiller with 14" Tilling Width

\$599.99 In-Stock

Quantity

1

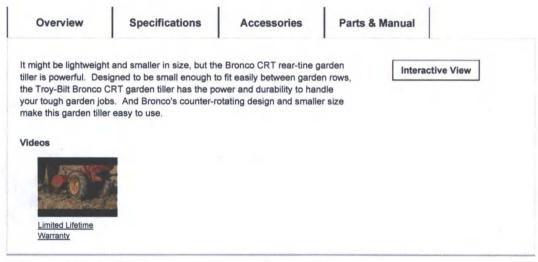
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Special Financing Available

Where to buy

ZOOM PHOTO



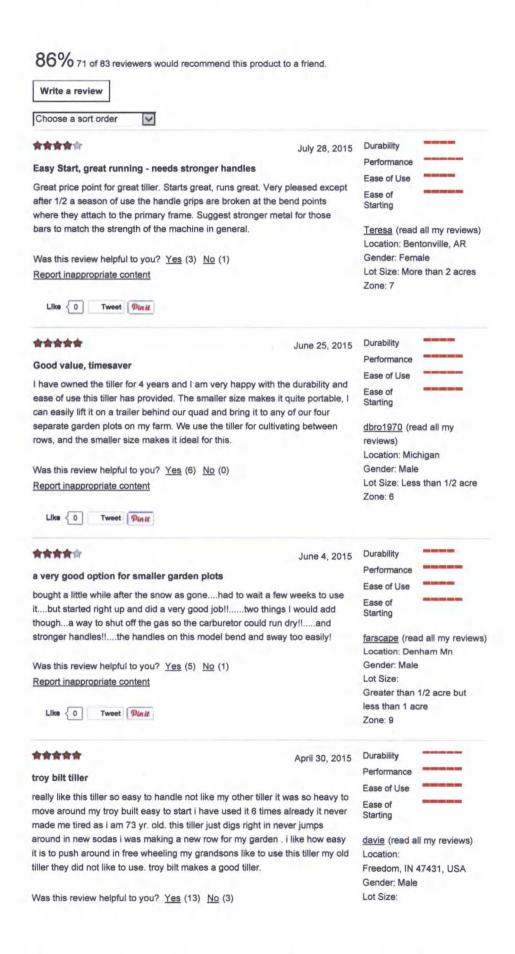


Financing Offers

The Bronco CRT qualifies for financing! Call 800-828-5500 for financing details and to apply. Click here for details

Customer Reviews

★★★★ 4.1 out of 5 stars (83 Reviews)



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Like { 0 Tweet Pinit		than 2 acres
	1 <u>2</u> <u>3</u> <u>4</u> <u>5</u> <u>17</u> <u>Next</u>	

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- † Models and pricing may vary by retailer. Please check with your retailer for specific availability and pricing.
- † *as rated by engine manufacturer



ZOOM PHOTO

Super Bronco CRT Garden Tiller

208cc Counter-Rotating Rear-Tine Rototiller with 16" Tilling Width

\$699.99 In-Stock

Quantity

1

Add to Cart

Special Financing Available

Where to buy



Overview

Specifications

Accessories

Parts & Manual

The Super Bronco CRT rear-tine rototiller from Troy-Bilt offers an outstanding value for a small or mid-size garden. The Super Bronco tiller gives you counter-rotating technology plus features normally found only on larger models - such as Just One Hand® Operation. Powerful enough to till deeply, yet small enough to fit between rows, the Super Bronco tiller is designed to tackle any task in your garden with ease.

Interactive View

Videos

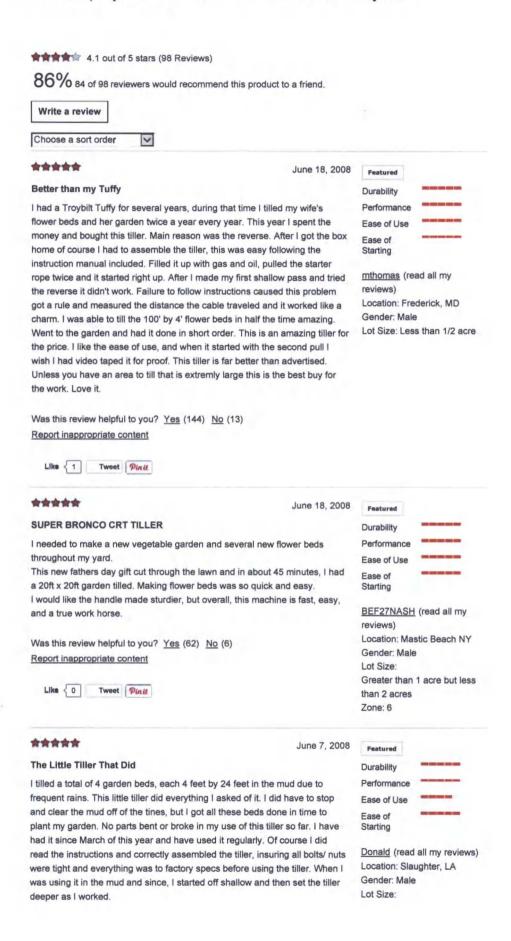


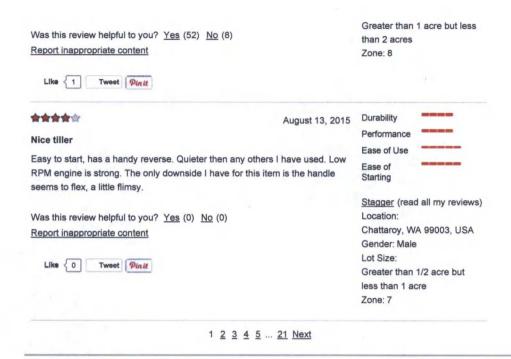
Limited Lifetime Warranty

Financing Offers

The Super Bronco CRT qualifies for financing! Call 800-828-5500 for financing details and to apply. Click here for details

Customer Reviews





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[†] Models and pricing may vary by retailer. Please check with your retailer for specific availability and pricing.

^{† *}as rated by engine manufacturer



Bronco™ Axis™ Vertical Tine Garden Tiller

208cc Vertical Counter-Rotating Rototiller with 16" Tilling Width

\$899.99 In-Stock

Quantity:

1

Add to Cart

Special Financing Available

Where to buy



Overview

Specifications

Parts & Manual

New for 2015: The Bronco™ Axis™ vertical-tine tiller creates the smoothest, fastest tilling experience. It features vertical tines that work together like a giant eggbeater, spinning in opposite directions to instantly drill down, then till forward through the dirt at their full depth. This forward motion minimizes vibrations and fatigue. And with Just One Hand® operation, you can walk on solid ground, not your freshly tilled soil.

Interactive View

Videos

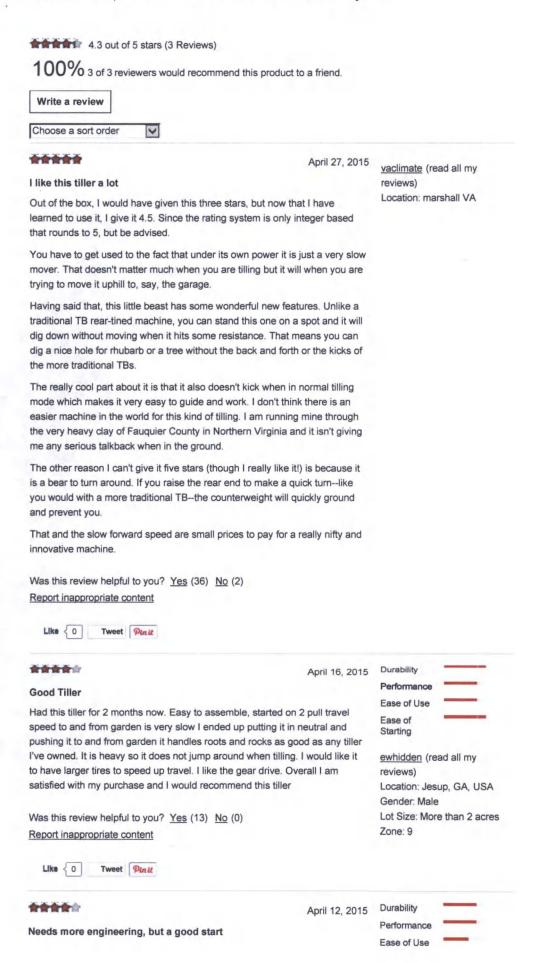


Bronco Axis Vertical
Tine Tiller

Financing Offers

The Bronco Axis qualifies for financing! Call 800-828-5500 for financing details and to apply. Click here for details

Customer Reviews



The tiller does what it stated in the video, however its a straight in and out operation on display. Its needs a travel speed out the garden and tines not working. Also the reverse operation needs to back up and no tines again spinning. Also the turning of the tiller in the garden is a bear and needs a lot of strength to do so. My Troy-Bilt Tuffy was ok, but a killer when it hit something in the ground, out of ground like a rabbit. Its a good start, but needs better turning and also put the tires on correct guys, I have to turn them around to get to the valve stems.

Grover (read all my reviews)
Location:
Chattaroy Washington
Gender: Male
Lot Size: More than 2 acres
Zone: 6

Was this review helpful to you? Yes (18) No (3) Report inappropriate content



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- † *as rated by engine manufacturer

POWERED by HONDA





There are lots of power equipment engines to choose from. But nothing makes an impression like the legendary reliability of Honda.

Powered by Honda means a heritage. A DNA of performance, from Formula One racing to motorcycles. It's a name that spells quality to customers.

Your equipment is part of your reputation. When you choose genuine Honda, you're making a long lasting, positive mark.







Built like no other.

honda-engines.com





HITS IT HARD, EVERY DAY.

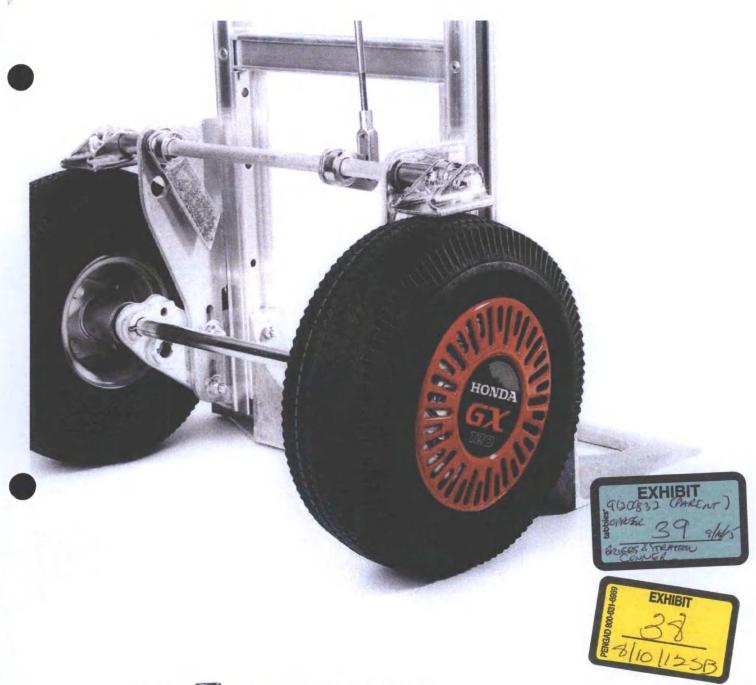
When you're on the job site, you don't want any hassles. Especially with your equipment. That's why from generators to pumps, compactors to pressure washers, more and more contractors demand Honda engines. They've got a long-standing reputation for being tough, quiet, fuel efficient, and now they come with a three-year limited warranty. We hit it hard every day, just like you. Find out more at honda.com.



Built like no other.



"Harranty applies to all Houth GX Series Engines, 100cc or larger purchased at retail or put allo sential service after January 1, 2009. Warranty excludes the Heach GXV160 model. See full warranty details at Houth.com. For optimum performance and safety, please send the owner's ministal before operating your Houta Power Equipment, C2009 American Houta Motor Co., Inc.





KEEPS RENTALS MOVING.

In the rental business, your equipment should have a name people trust and it should run day after day, customer after customer. That's why so many equipment professionals choose Honda engines. They're tough, quiet, fuel efficient and legendary for minimal down time. Plus, now they come with a three-year limited warranty. With Honda, wherever people are hauling your equipment, you're going in the right direction. Find out more at honda.com.



Built like no other.



"Warranty applies to all Hunds QX Series Engines, 100cs or large purchased at retail or put into rental service after January 1, 2009. Warranty endudes the Hunds QXY190 model. See full warranty details at Hunds com. For opinium performance and satety please need the owner's manual before operating your Hisrda Pover Squipment. Q2009 American Hunds Motor Co., Inc.







HELPS BUSINESS GROW.

Nobody has to tell you that the lawn care business is full of unknowns from the weather to gas prices. That's why professionals count on Honda engines. They're legendary for being fuel efficient, quiet and tough. Plus, now they come with a three-year limited warranty. Good engines can do more than just make your business run. They can help it grow. Find out more at honda.com.





Built like no other.



"Warranty applies to all Hunds GX Sense Engines, 100cs or larger purchased at retall or put info rental senses after January 1, 2009. Warranty excludes the Hunds GXY190 model. See hill washands that Honds com. For optimum portermance and safety please read the opener's manual before operating your Honds Power Equipment. ©2009 American Henda Monte Co., inc.



All Of Our Engines

At Honda environmental responsibility an't just a trend. It's our hentage. In 1983, we introduced our legendary overhead valve engine. The design is so efficient, it only took a few minor modifications to meet current emission standards.

That means when you buy a Honda engine today, it won't become

Are Green.

obsolete tomorrow. In fact, you won't have to worry about your Honda engine. Just as you've come to expect, it'll work hard, and keep working for a long, long time. After all, we've built our reputation on durability, dependability and advanced technology. And we've done so with the cleanest conscience.

HONDA ENGINES

Power With A Clear Advantage.

EXHIBIT 58 58 101/258

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In The World. hardworking and durable as -

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our legendary overhead valve design needed only a few minor

become obsolete romorous fou car count on year Honda to perform his source me ome Even after the thirty work you put it through

Sir take a good look at Honda With technological innovations,



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AHPB 315025

AHGXC001723

We Work Well Under Pressure





29

That's why Honda engines are the overwhelming choice of power for so many in the pressure washer industry. It's no wonder. For over 30 years Honda has produced reliable general purpose

engines to meet a variety of industry demands. The Honda GX200 is no exception. This 6.5 horsepower workhorse stands ready to deliver the kind.

of quiet, reliable power you've come to expect from all Honda engines. And, like all Honda OHV engines, the GX200 is emission certified for California and meets EPA. If your requirements call for

superior performance and reliability, then your choice is clear. We work well under pressure—And that's a clear advantage to you.



Power With A Clear Advantage.

Call 1-800-426-7701 For More Information.

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AHPB 315028

Horle Of Concrete



On February 2nd, We'll Have Something Concrete To Show You.



You're invited to the unveiling of the new Honda GX Series engines at World of Concrete. They're even more powerful, quieter, and use less fuel. And because they're from Honda, they're also rock solid. honda.com



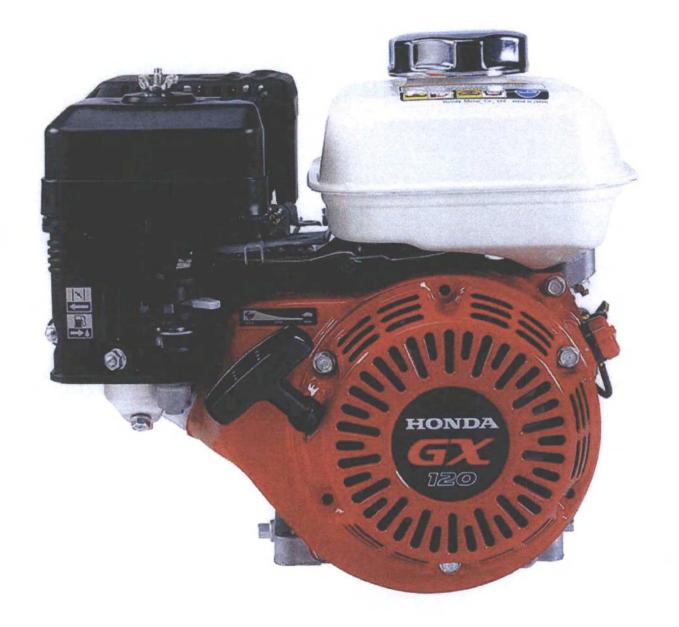
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"Recruity appress to all matter (Assim English). Date of urget participal of stellar points with inspections in a rep. 1, 200 Morrolly extended the different law of matter and the country of the countr



Confidential Opposer Exhibit 45





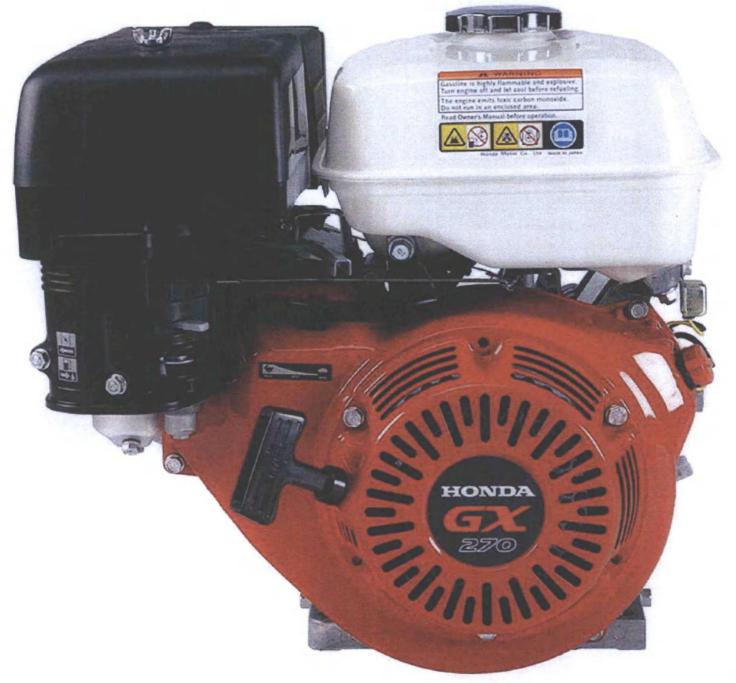


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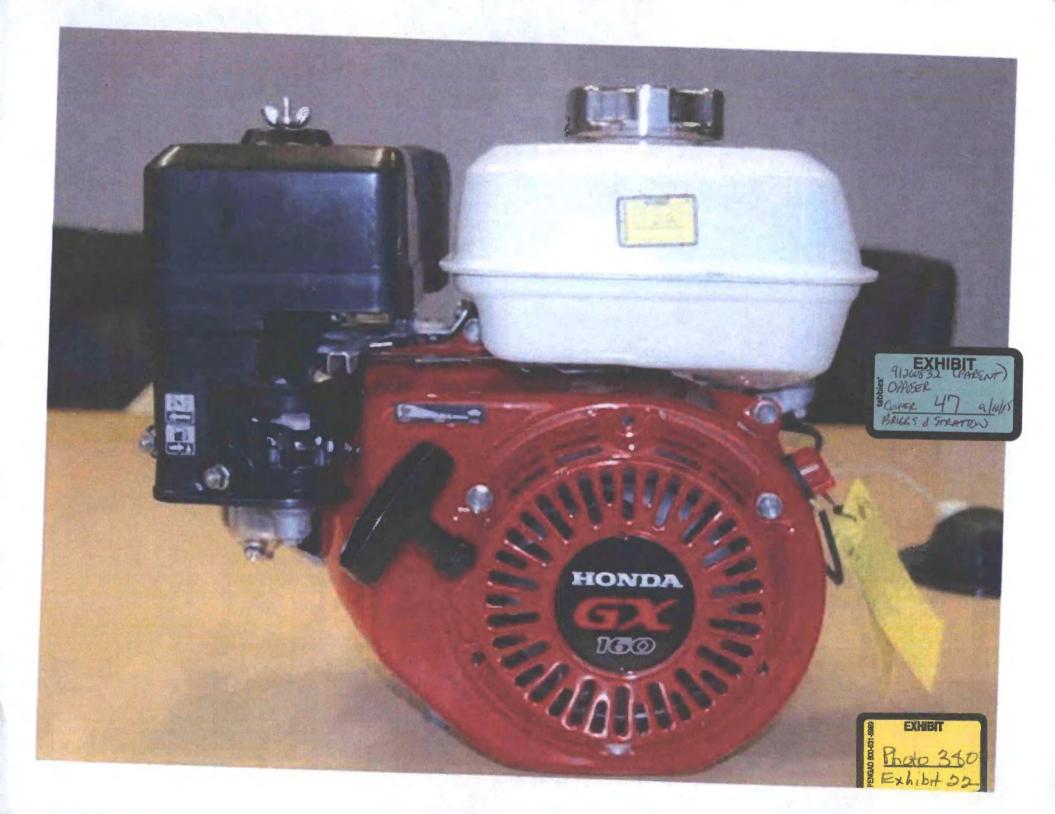


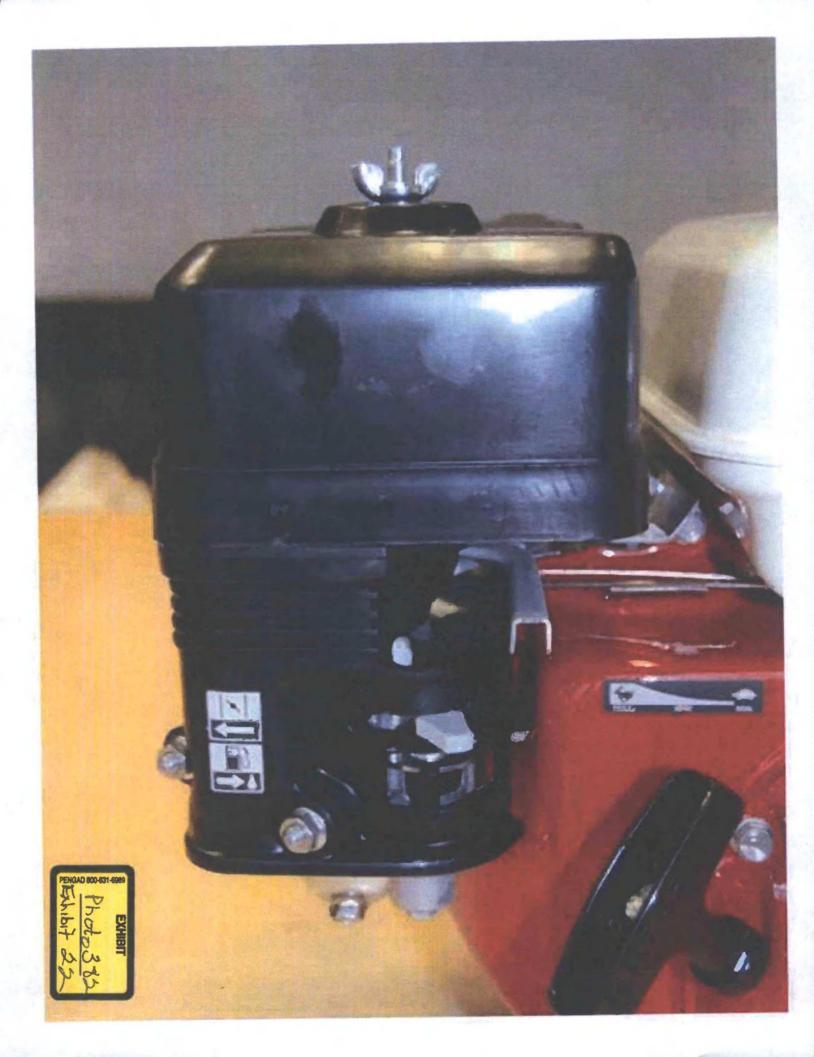


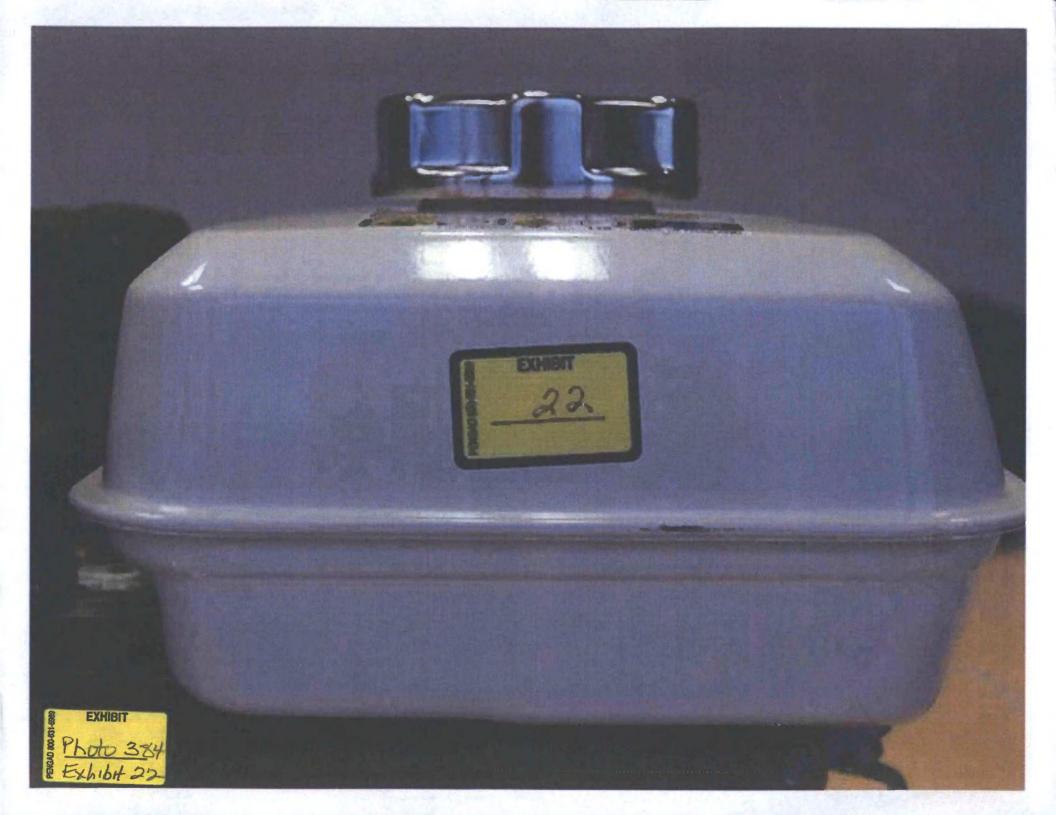
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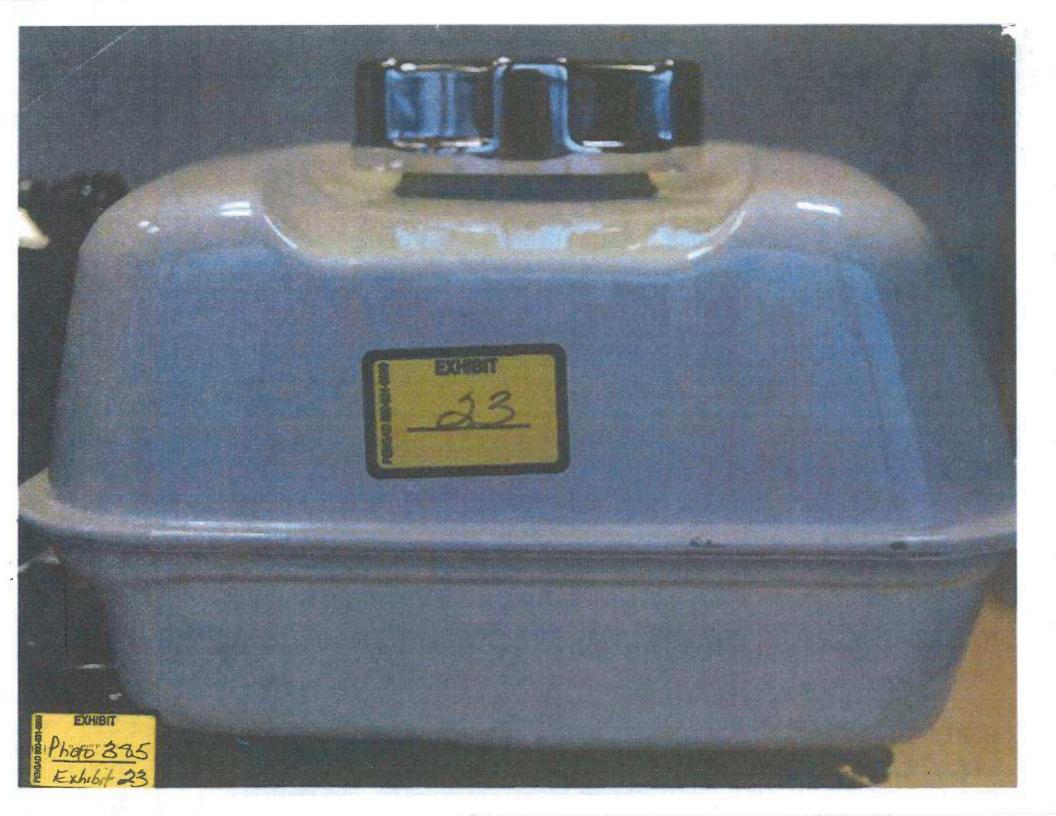


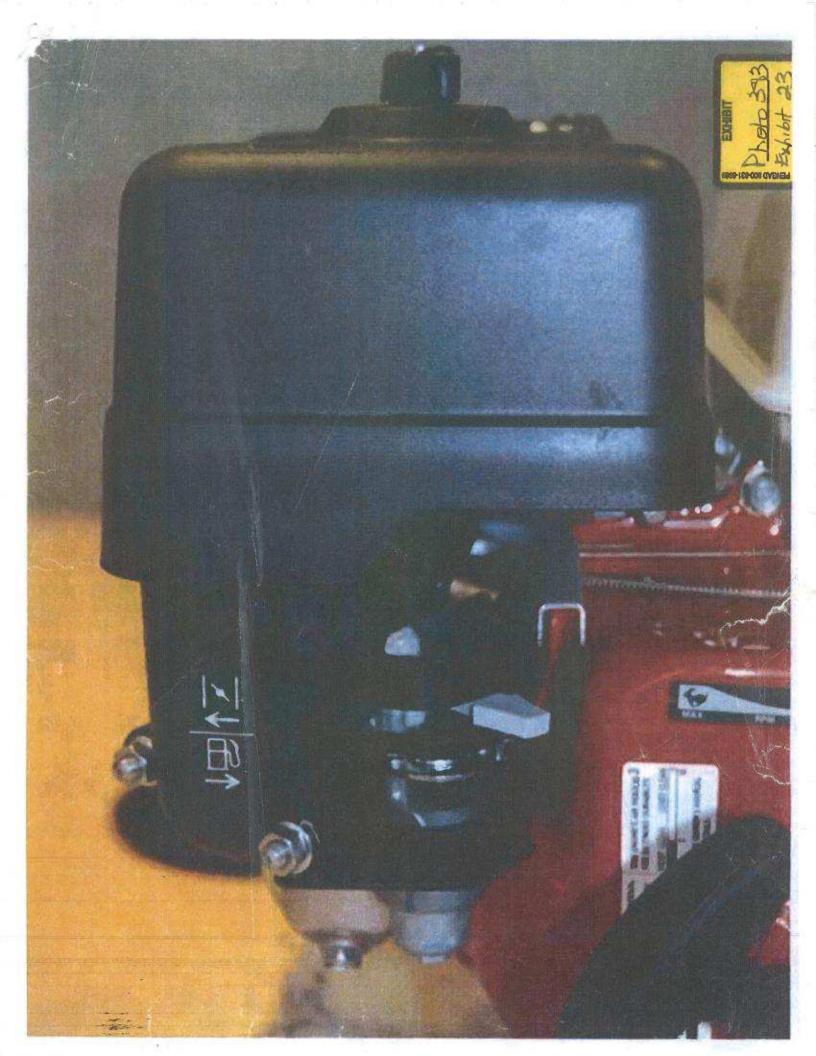




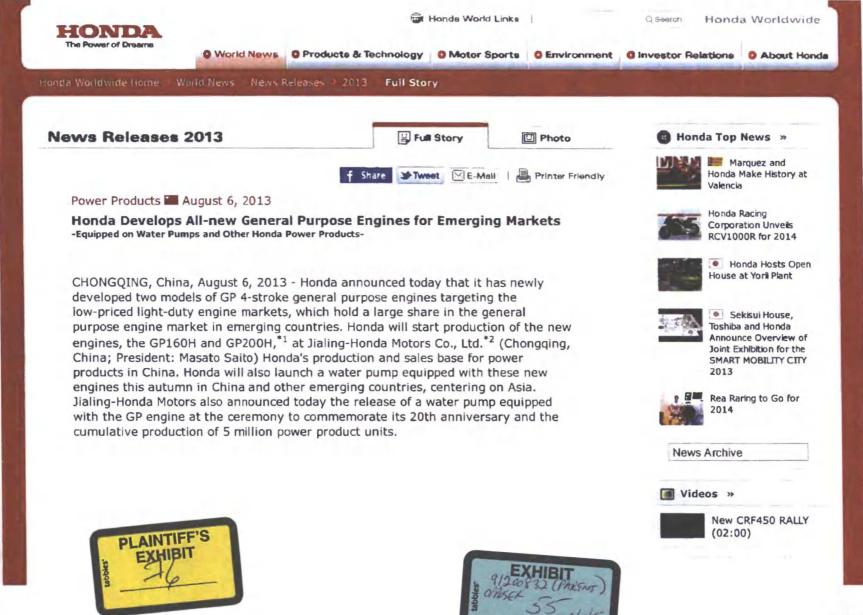








Confidential Opposer Exhibit 49-54







+

GP160H

WL30XH water pump

Honda's general purpose engines feature outstanding reliability, excellent quality, and a compact design that ensures compatibility with a wide range of installations. While inheriting these characteristics, the GP engines were developed for installation on products such as water pumps and generators used especially in emerging countries, where these products are commonly used for relatively short continuous operating times with light workloads. By equipping the GP engines on water pumps, which enjoy high demand as indispensable agricultural equipment in these countries, Honda alms to increase sales in the inexpensive, light-duty products markets in the emerging countries, an area dominated by Chinese manufacturers.

These GP series engines are the first general purpose engines developed by Honda specifically for emerging countries. With this launch, Honda aims to further increase sales of light-duty engines, which account for the bulk of 4-stroke general purpose gasoline engine sales in emerging markets (approximately 9.7 million units*3), thereby "helping people get things done," a vision of its power products business ever since its founding.

Honda's general-purpose engine lineup includes the following: Medium- to large-sized GX series engines, endorsed in a wide range of industries as world-standard power units for professional use on small construction equipment and agricultural machinery; the Mini 4-stroke series engines for hand-held equipment such as trimmers; and the GC series engines for home use mainly in Europe and North America.

*1



Safety for Everyone Demonstration Video (04:38)



Casey Stoner MotoGP Machine test in TWIN RING MOTEGI (02:14)



Mobilio Prototype Promotional Video (02:16)



Civic Type R at Nurburgring (01:30)



Honda Worldwide | August 6, 2013 "Honda Develops All-new General Purpose Engines for Emergi... http://world.honda.com/news/2013/p130806General-purpose-Engines-Emerging-Markets/index.html

GP160H (displacement: 163 cm³; maximum power: 3.6 kW); GP200H (displacement: 196 cm³, maximum power: 4.1 kW)

- *2 Production items include general purpose engines, water pumps, lawnmowers and tillers.
- *3 Based on a Honda 2011 survey

Unit sales target

(Annual total for China sales and exports, including engines installed on final products)

200,000 units

Key features of GP engines

[Specifications suitable for light-duty use]

O Fits optimal use conditions for the water pumps and generators in emerging countries (Light load output: below rated load; Operating temperature: -5 to 40°C)

[Environmental performance]

O Complies with emission regulations in China

[Styling design]

O A black plastic recoil cover with a white fuel tank and fan cover brings out the character of a light-duty engine

• Specifications of the New Honda GP Engine

Engine	GP160H	GP200H
Engine type	Air-cooled 4-stroke single-cylinder gasoline engine (OHV)	

· Honda Worldwide | August 6, 2013 "Honda Develops All-new General Purpose Engines for Emergi... http://world.honda.com/news/2013/p130806General-purpose-Engines-Emerging-Markets/index.html

Number of cylinders / bore×stroke (mm)	1/68.0×45.0	1/68.0×54.0
Displacement (cm ³)	163	196
Compression ratio	8.5:1	8.5:1
Maximum power (kW/rpm)*	3.6/3,600	4.1/3,600
Maximum torque (N·m/rpm)*	10.3/2,500	12.4/2,500
Continuous rated output (kW/rpm)	2.9/3,600	3.7/3,600
Fuel consumption (L/h) (at continuous rated output)	1.4	1.7
Fuel	Unleaded gasoline for automobiles	
Fuel tank capacity (L)	3.1	
Ignition system	Transistor magneto	
Governor system	Mechanical	
Air cleaner	Semi-dry, dual element	
Lubrication system	Forced spray	
Oil capacity (L)	0.58	0.6
Overall length (mm)	306	315
Overall width (mm)	363	378
Overall height (mm)	335	335
Dry weight (kg)	15.0	16.0
Starting system	Recoil starter	

* The power ratings of the engines indicated in the table are the net power output tested on a production engine model and measured in accordance with SAE J1349 at 3,600 rpm (maximum output) and 2,500 rpm (maximum torque). Mass production engines may vary from these values. Actual power output for the engine installed in the final product will vary depending on numerous factors including the engine speed in application, environmental conditions, maintenance and other variables.



Honda's power products business will celebrate its 60th anniversary in October 2013.

Related Links

- Honda Worldwide | Power Products
- Honda Worldwide | General Purpose Engines
- Honda Worldwide | Water Pumps

Page Top O

Honda Worldwide site

Home | Site Map | Site Index | About this Site

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EXHIBIT C





EXHIBIT D



EXHIBIT G



EXHIBIT H



EXHIBIT I



EXHIBIT J



EXHIBIT K

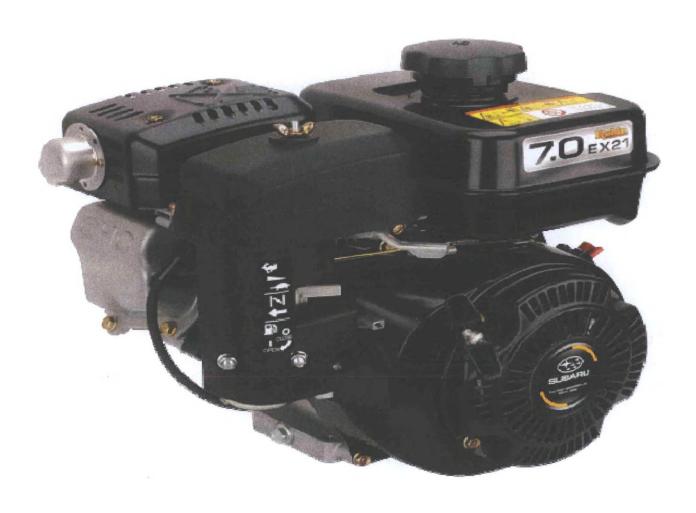


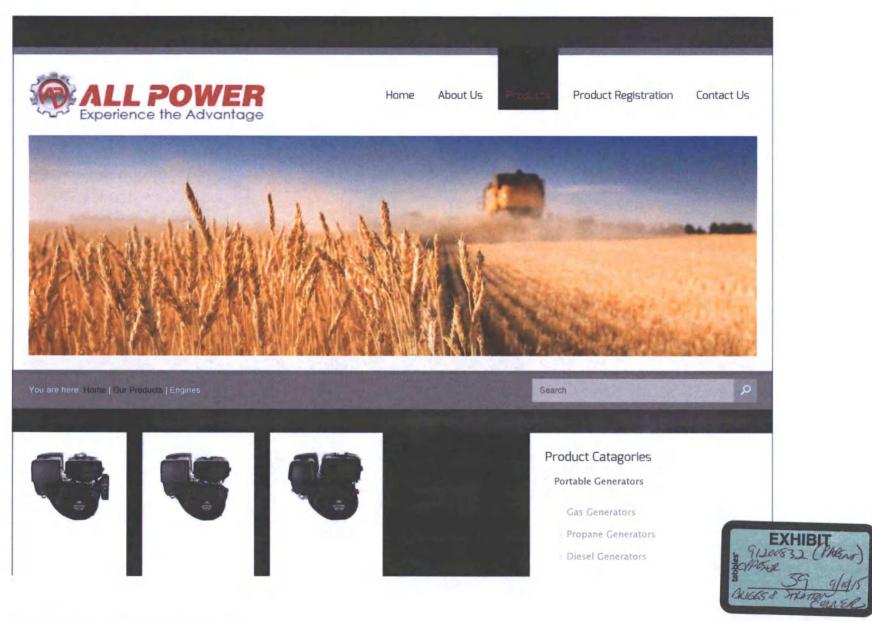
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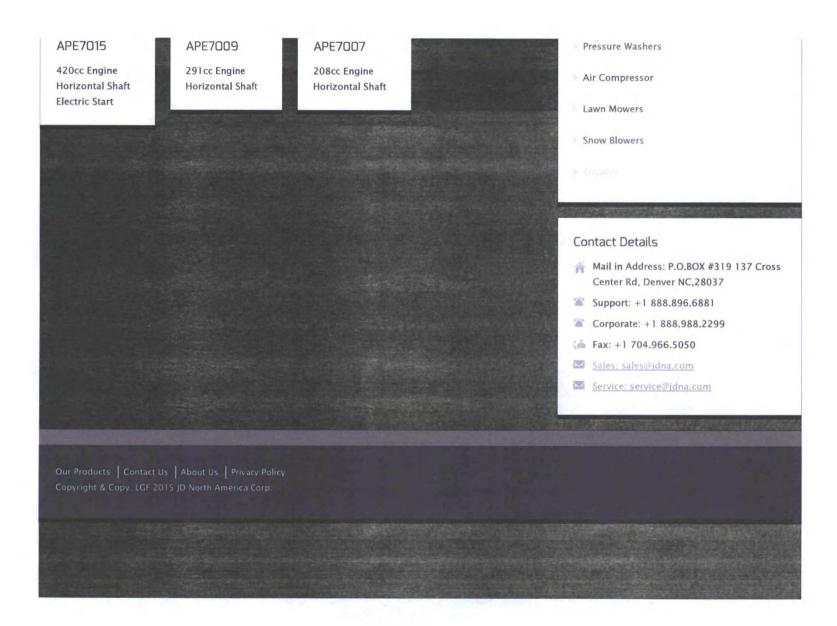
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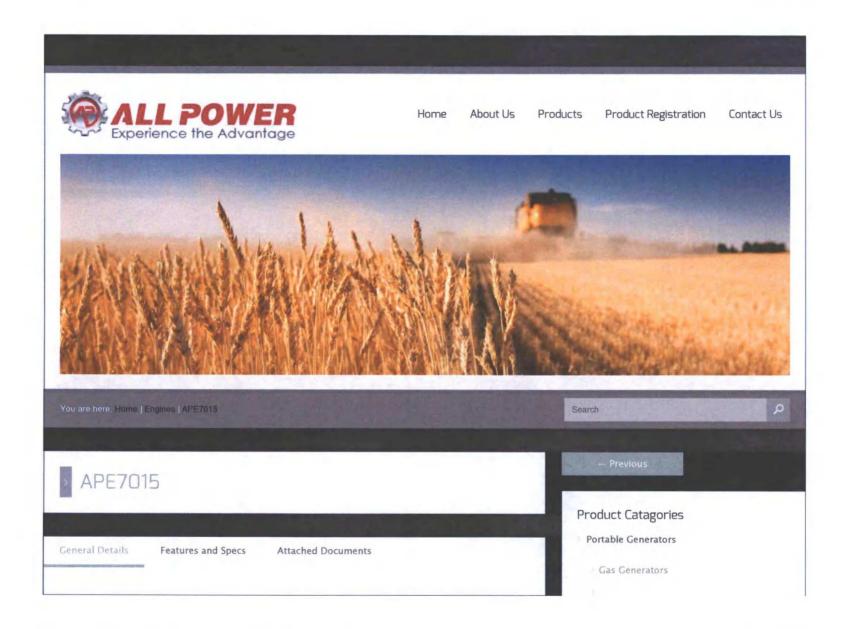


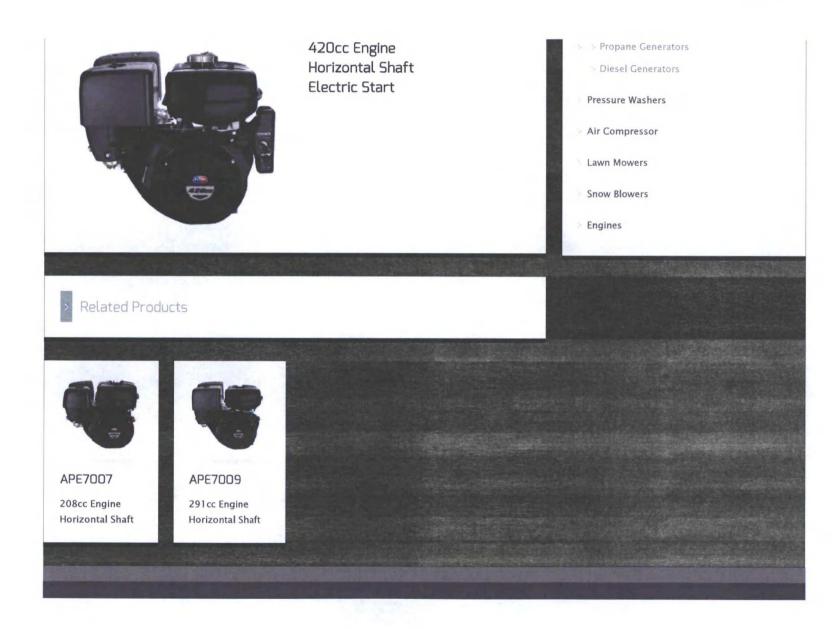
Confidential Opposer Exhibits 57-58

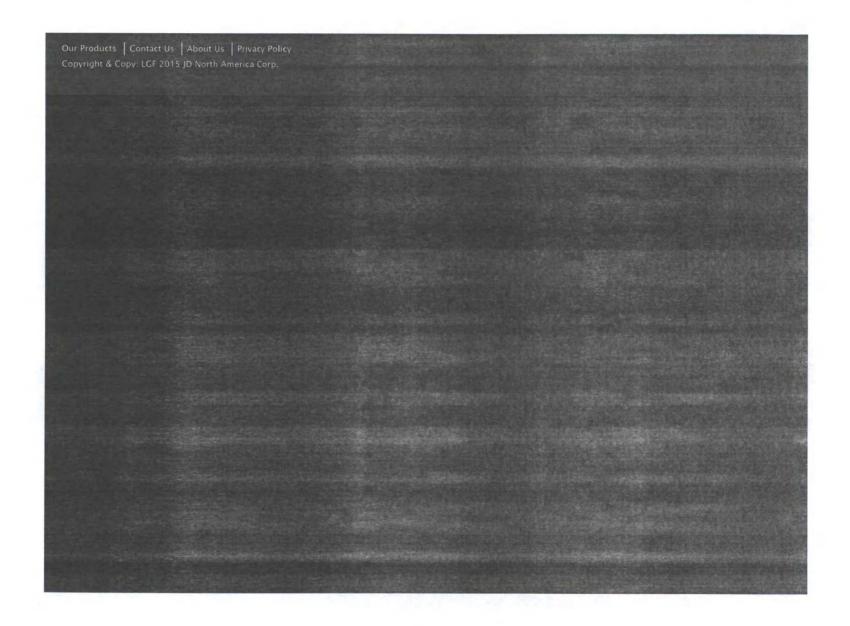


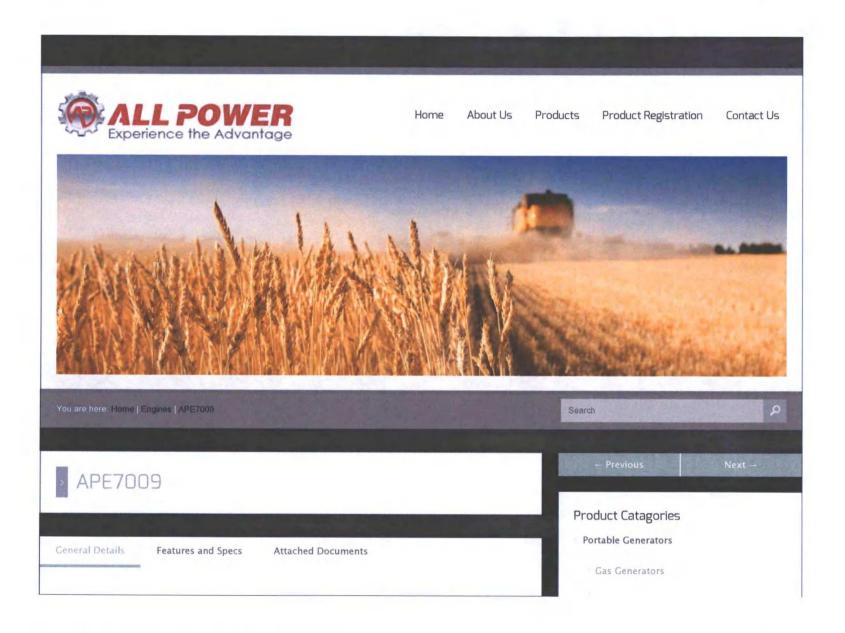
http://allpoweramerica.com/?page_id=1843

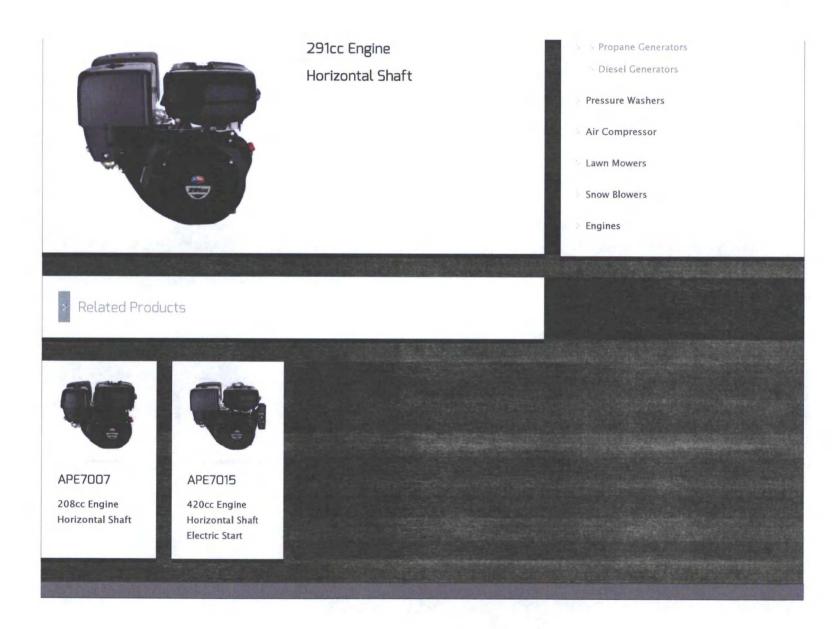


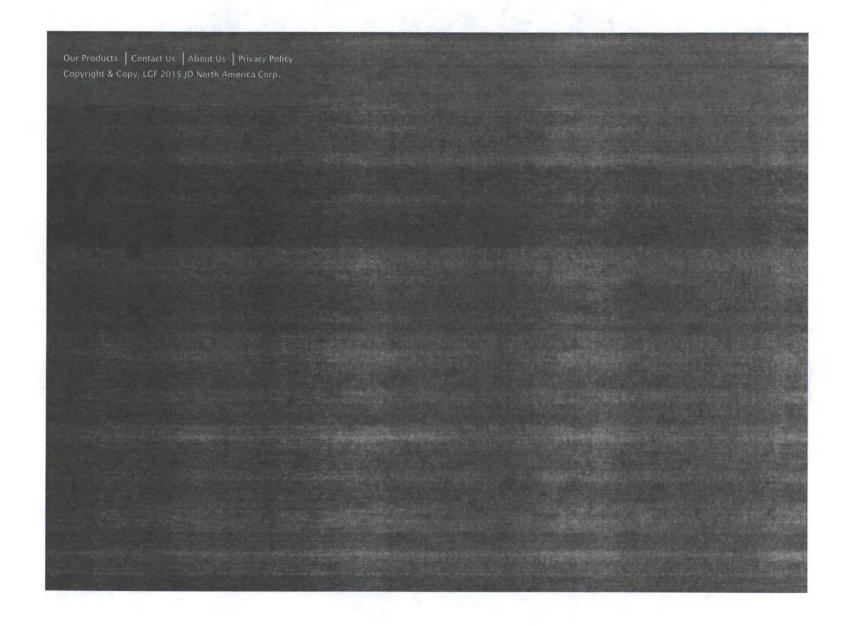


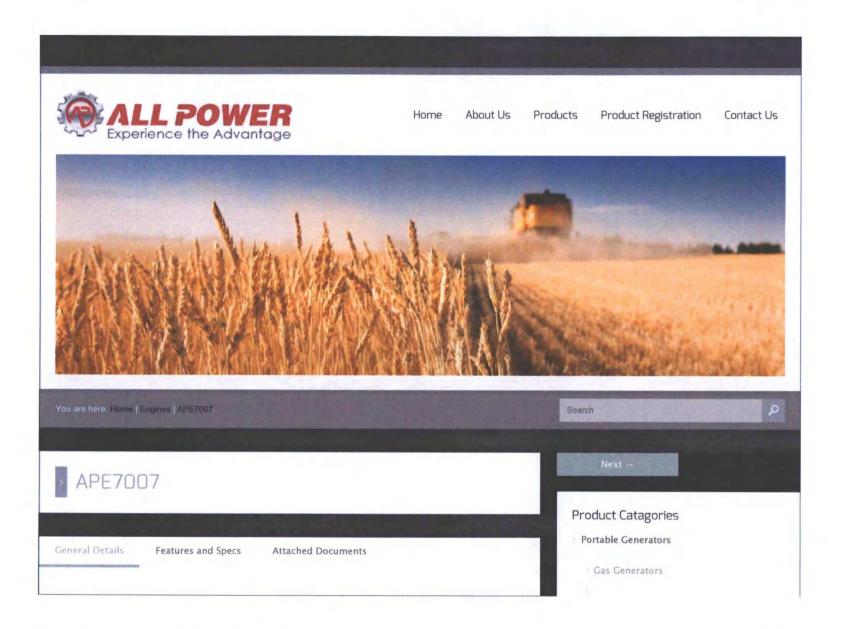


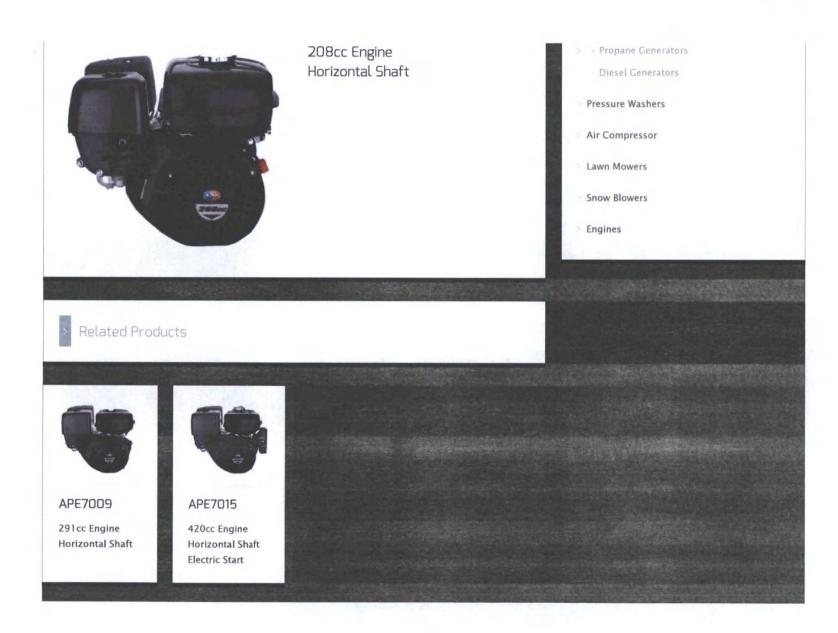


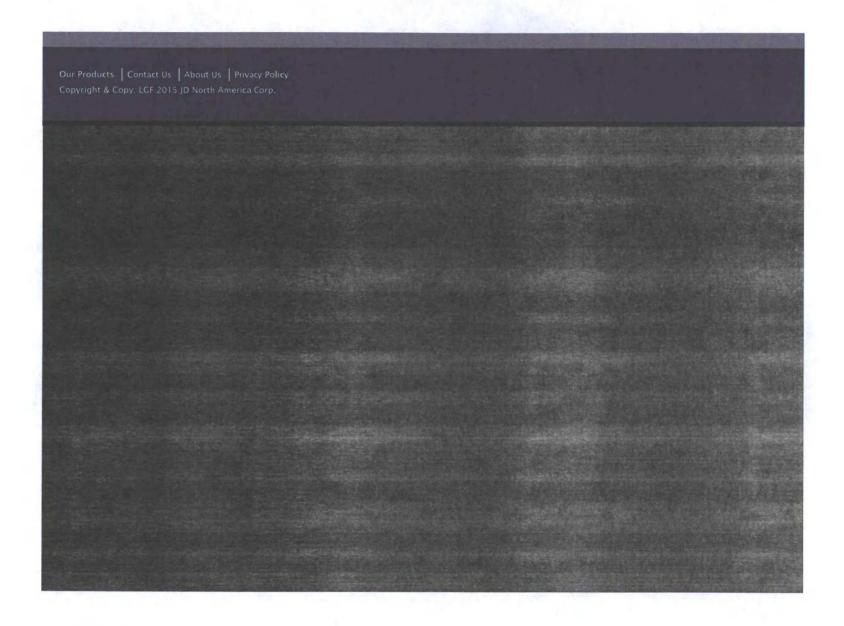


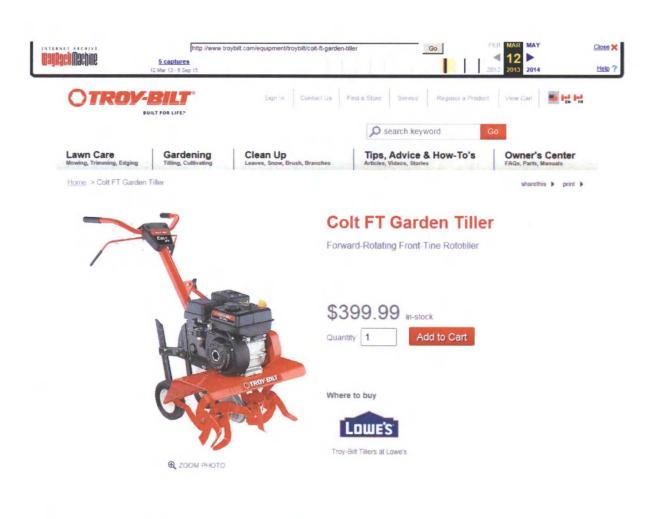












Overview

Specifications

Parts & Manual

EXHIBIT
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CO 9/11/5
PRICES SPATECOMER

The Colt™ FT garden rototiller features a powerful 208cc Troy-Bilt® OHV 4-cycle engine and patented Bolo® tines that cut through soil with ease, resulting in finely tilled, well-aerated soil. The Bolo curve design allows the tines to cut and dig at an offset angle for groundbreaking while the swept-back angle turns under the soil. With adjustable tilling widths, chain drive transmission and ability to till up to 7" deep, the Colt FT front-tine rototiller is designed for premium garden soil preparation.

Interactive View

- † † The operator's manual posted is for general information and use. To ensure the download of the operator's manual specific to your unit, we require a model and serial number. Click here to enter that information.
- † Models and pricing may vary by retailer. Please check with your retailer for specific availability and pricing.
- † *as rated by engine manufacturer

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Lawn Care

Lawn Mowers

- » Riding Mowers
- » Walk-Behind Mowers

String Trimmers

- » 4-Cycle String Trimmers
- » 2-Cycle String Trimmers

Trimmer Attachments

Leaf Blowers

- » Handheld Blowers
- » Electric Blowers
- » Wheeled Blowers

Lawn Edgers



Gardening Tillers

Garden Cultivators

Garden Tools

- » Trimming
- » Digging
- » Weeding

Hauling Carts



Trees and Leaves

Log Splitters

Chipper Shredders

Chipper Shredder Vacs

Leaf Blowers

- » Handheld Blowers
- » Wheeled Blowers
- » Electric Blowers



Snow

Snow Throwers

- » Two-Stage
- ▶ Single-Stage

Pressure Washers Air Compressors Wet/Dry Vacuums & Job Site Tool Boxes



CASE NO. CV05-8879 SJO (VBKx)

American Honda Motor Co.. Inc.

VS. The Pep Boys - Manny, Moe, & Jack, et al.

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DATE EVID.

BY

Deputy Clark

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Mi-T-M Corporation

AHPB 016750

AHGXC001199

2003 Industrial Pressure Washers Air Compressors Wet/Dry Vacuums & Job Site Tool Boxes

Mi-T-M Corporation

AHPB 016750

CW Premium Series Gasoline - Belt Drive

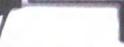
1. Performance-proven engines with low-oil protection

- 2. Belt drive triplex ceramic plunger pump
- 3. Quick connect nozzles (0°, 15°, 25° and 40°)
- 4. Bypass system
- 5. Forged brass manifold (Nickel plated brass on CW-4004-3MV0)
- 6. Water filter with clear sleeve for screen inspection
- 7. Thermal relief valve
- 8. Stainless-steel and brass unloader mounted on base plate





9. 3/8 inch x 50 foot non-marking hose with quick connects, swivel and bend restrictors



- 10. Professional-grade insulated trigger gun with safety lock-off
- 11. 36 inch steel powder coated lance with rubber grip



						Unit Dim.	Ship Wt.	Net Wt.
Model #	PSI/bar	GPM/tpm	HP	Engine	Pump	LxWxH (in./cm.)	lbs./kg.	lbs./kg.
CW-2505-4MGH	2500/172	4.4/16.7	11.0	OHV Honda	General	48.5x35.5x30.5/123x90x77.5	299/136	212/96
CW-2505-4MGV	2500/172	4.4/16.7	11.0	OHV Vanguard	General	48.5x35.5x30.5/123x90x77.5	299/136	212/96
CW-3004-4MGH	3000/207	3.5/13.3	11.0	OHV Honda	General	48.5x35.5x30.5/123x90x77.5	299/136	212/96
CW-3004-4MGV	3000/207	3.5/13.3	11.0	OHV Vanguard	General	48.5x35.5x30.5/123x90x77.5	299/136	212/96
CW-3255-4MV0*	3200/221	5.1/19.3	16.0	OHV Vanguard	General	48.5x35.5x30.5/123x90x77.5	323/147	236/107
CW-3504-4MGH	3500/241	3.5/13.3	13.0	OHV Honda	General	48.5x35.5x30.5/123x90x77.5	307/139	220/100
CW-3504-4MGV	3500/241	3.5/13.3	13.0	OHV Vanguard	General	48.5x35.5x30.5/123x90x77.5	307/139	220/100
CW-4003-3MGH	4000/276	3.0/11.4	13.0	OHV Honda	General	48.5x35.5x30.5/123x90x77.5	307/139	220/100
CW-4003-3MGV	4000/276	3.0/11.4	13.0	OHV Vanguard	General	48.5x35.5x30.5/123x90x77.5	307/139	220/100
CW-4004-3MV0"	4000/276	4.0/15.1	16,0	OHV Vanguard	General	48.5x35.5x30.5/123x90x77.5	323/147	236/107
CW-4004-4MV0*	4000/276	4.0/15.1	16.0	OHV Vanguard	AR	48.5x35.5x30.5/123x90x77.5	327/148	249/113
	'Elec	tric start (ba	tterv i	ncluded)			0411110	2101.10

Options:

- Roll cage (9.0 16.0 H.P.) (CX-0053, CX-0054, CX-0055)
- Electric start (11.0 13.0 H.P. Honda/Vanguard) Low pressure detergent injector (AW-8300-0000) (CX-0027, CX-0045, CX-0050, CX-0051)
- . Dual lance (CX-0005)
- 4000 PSI hose (CX-0006)

AHPB 016751

. High pressure detergent injector 50-0161)

Built for longevity and reliability, these industrial belt-driven pressure washers are the foundation of Mi-T-M.



Frame Design:

- 12. Pneumatic mag tires with tubes for longer life
- 13. Solid steel threaded axles
- 14. 1/4 inch powder coated steel base plate to reduce vibration
- 15. Dual rubber isolators to absorb vibration
- 16. Convenient hose wrap
- Gun/wand holder for convenient storage
- Powder coated 1-1/4" stee tube handles to resist breakage
- Heavy-duty dual cogged belt drive system to prevent slippage
- Two-piece beit guard with 1/4 turn release for quick access to beits



By-Pass System:

- Large 3/4" I.D. by-pass hose for increased water volume
- · Creates less heat build-up
- Increases by-pass time over direct mount unloader valves
 - · Allow for easy testing of unloaders
- External mounted unloader for reduced vibration/ pulsation of internal parts
- 1. Water enters inlet of unit.
- Water travels through the pumo to the unloader via a wire braided high pressure hose.
- When trigger is released the water travels back to the injet supply via a 3/4" by-bass hose, creating the by-pass hop.









AHPB 016752

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Page 3

AHGXC001202

Mi-T-M's reputation was built on the durability and reliability of our equipment, with our frame design being the foundation of our success. The technically designed base plates are life-tested to meet the sound performance required by our customers.

Why Mi-T-M?





- Pneumatic tires with tubes
- 2. 1/4 inch powder coated base plate (Exceeds industry standards)
- Solid steel threaded axles External bypass hose system 4.
- 5. Unloader manifold block
- 6. Industrial grade unloader system
- 7. Water filter with clear sleeve for inspection of cartridge screen
- 8. Rubber isolators
- Powder coated steel tube handles
- 10. Hose wrap with gun/wand holder
- 11. Color coded high pressure tips
- 12. 2-piece belt guard with 1/4-turn release for quick access to belts
- 13. Dual coo belts
- 14. Industrial OHV engine

AHPB 016756

Page 7

JCW Series Gasoline - Belt Drive

9. 3/8 inch x 50 foot

non-marking hose

swivel and bend

restrictors

with quick connects,

1. Performance-proven engines

with low-oil protection

Belt drive triplex piston pump with ceramic plungers

3. Quick connect nozzles (0°, 15°, 25° and 40°)

4. Forged brass manifold (Nickel plated brass on 4000 PSI model)

5. In-line water strainer

6. Stainlesssteel and brass unloader

7. Thermal relief valve

8. Adjustable pressure

MI-T-M Corporation

10. Professional-grade insulated trigger gun with safety lock-off

11. 36 inch steel powder coated lance with rubber grip



AHPB 016757

						Unit Dim.	Ship Wt.	Net Wt.
Model #	PSVbar .	GPM/lpm	HP	Engine	Pump	LxWxH (in/cm.)	lbs./kg.	lbs/kg.
JCW-1504-0MHB	1500/103	3.4/12.9	5.5	OHV Honda	AA	38x21x21/96.5x53x53	181/82	124/56
JCW-1504-0MRB	1500/103	3.4/12.9	6.0	OHC Robin	AR	38x21x21/96.5x53x53	181/82	124/56
JCW-1504-0MVB	1500/103	3.4/12.9	6.0	OHV Vanguard	AR	38x21x21/96.5x53x53	181/82	124/56
JCW-2003-0MHB	2000/138	2.8/10.6	5.5	OHV Honda	AR	38x21x21/96.5x53x53	171/78	115/52
JCW-2003-0MRB	2000/138	2.8/10.6	6.0	OHC Robin	AR	38x21x21/96.5x53x53	171/78	115/52
JCW-2003-0MVB	2000/138	2.8/10.6	6.0	OHV Vanguard	AR	38x21x21/96.5x53x53	180/82	124/57
JCW-2703-1MIB	2700/186	2.4/9.1	6.5	OHV Intek I/C	AR	38x21x21/96.5x53x53	171/78	115/52
JCW-2703-0MHB	2700/186	2.4/9.1	6.5	OHV Honda	AR	38x21x21/96.5x53x53	171/78	115/52
JCW-2703-0MRB	2700/186	2.4/9.1	7.0	OHC Robin	AR	38x21x21/96.5x53x53	171/78	115/52
JCW-3003-0MHB	3000/207	3.0/11.4	9.0	QHV Honda	AR	42x26x28/106.7x66x71	212/95	149/68
JCW-3003-0MRB	3000/207	3.0/11.4	9.0	OHC Robin	AR	42x26x28/106.7x66x71	212/95	149/68
JCW-3003-0MVB	3000/207	3.0/11.4	9.0	OHV Vanguard	AR	42x26x28/106.7x66x71	214/97	151/68
JCW-3004-0MHB	3000/207	3.5/13.3	11.0	OHV Honda	AR	42x26x28/106.7x66x71	240/109	159/72
JCW-3004-0MVB	3000/207	3.5/13.3	11.0	OHV Vanguard	AR	42x26x28/106.7x66x71	240/109	159/72
JCW-3504-0MHB	3500/241	3.5/13.3	13.0	OHV Honga	AR	42x26x28/106.7x66x71	250/114	167/76
JCW-3504-0MVB	3500/241	3.5/13.3	13.0	OHV Vanguard	AR	42x26x28/106.7x66x71	250/114	167/76
JCW-4004-0MVB	4000/276	4.0/15.1	16.0		AR	42x26x28/106.7x66.71	284/129	200/91
	11 miles	Lindpolian	AND to	- Cafeira				

Options:

- . Dual lance (CX-0005)
- . 4000 PSI hose (CX-0006)

- Low pressure detergent injection (AW-8300-0000)
- High pressure detergent injection (50-0161)

This series offers the performance you expect from a belt drive pressure washer at a price that won't disappoint you.



Frame Design:

- 12. Two-piece belt guard with 1/4 turn release for quick access to belts
- 13. Dual cogged belt drive system to prevent slippage
- Powder coated steel tube handles to resist breakage



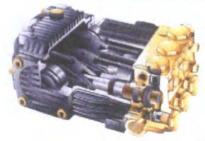
19. Convenient hose wrap

vibration

20. Gun/wand holder for convenient storage



JCW Series Pump:



- Forged brass manifold for strength and long
- Ultra form valve cages for durability, strength and long life
- · "U" cup double lip low pressure seals for a positive seal
 - Oversized tapered roller bearings for maximum life and load disbursement
- Forged, precision ground and hardened crankshaft for extremely long life and durability
- Stainless steel plunger rods for strength, back-up and O-ring plunger sealing system









AHGXC001208

Page 9

JP Series Gasoline - Direct Drive

- Quick connect nozzles (0°, 15°, 25° and detergent nozzle)
- 2. Performance-proven engines with low-oil protection
- 3. Direct drive triplex piston pumps with ceramic plungers
- 4. Thermal relief valve
- 5. Stainless-steel and brass unloader
- 6. In-line water strainer
- 7. Built-in adjustable low pressure detergent injection
- 8. Adjustable pressure
- 9. Forged brass manifold

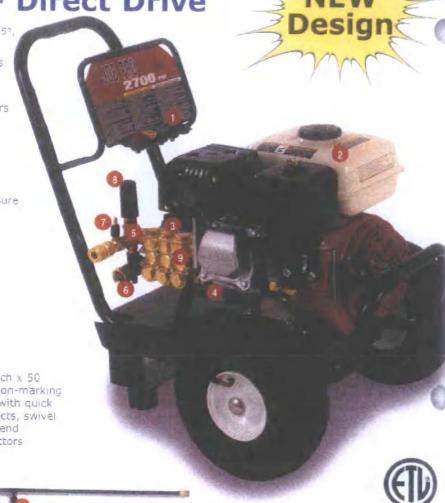


10. 3/8 inch x 50 foot non-marking hose with quick connects, swivel and bend restrictors

"Electric start - barrory included.



- 11. Professional-grade insulated trigger gun with safety lock-off
- 12. 36 inch lance with rubber grip



9			12. 36 inch lance with rubber grip AHPB 016759						to UL-1776 Standards	
Model #	SCIFA	COMM	110			Unit Dim.	Ship Wt.			
JP-2403-0MHB	PSI/bar	GPW/lpm	-	Engine	Pump	LxWxH (inJem.)	lbs/kg.	ibs./kg.		
	2400/166	2.3/8.7	5.5	OHV Honda	AR	30x21x26/76x53.5x66	112/51	85/39		
JP-2403-0MRB	2400/166	2.3/8.7	6.0	OHC Robin	AR	30x21x26/76x53.5x66	112/51	85/39		
JP-2403-OMVB	2400/166	2.3/8.7	6.0	OHV Vanguard	AR	30x21x26/76x53.5x66	112/51	85/39		
JP-2703-0MHB	2700/186	2,4/9.1	6.5	OHV Honda	AR	30x21x26/76x53.5x66	112/51	85/39		
JP-2703-0MIB	2700/186	2.4/9.1	6.5	OHV Intek I/C	AR	30x21x26/76x53.5x66	112/51	85/39		
JP-2703-0MRB	2700/186	2.4/9.1	7.0	OHC Robin	AR	30x21x26/76x53,5x66	112/51	85/39		
JP-3003-0MHB	3000/207	3.0/11.4	9.0	OHV Honda	AR	33x22.5x26/83.3x57x66	171/79	121/55		
JP-3003-0MIB	3000/207	3.0/11.4	10.0	OHV Intek VC	AR	33x22.5x26/83.3x57x66	171/79	121/55		
JP-3003-0MRB	3000/207	3.0/11.4	90	OHC Robin	AR	33x22.5x26/83.3x57x66	173/79	123/58		
JP-3003-0MVB	3000/207	3.0/11.4	9.0	OHV Vanguard	AR	33x22.5x26/83.3x57x66	173/79	123/56		
JP-3004-0MHB	3000/207	4.0/15.1	13.0	OHV Honda	AR	33x22.5x26/83.3x57x66	186/85	136/62		
JP-3004-0MVB	3000/207	4.0/15.1	13.0	OHV Vanguard	AR	33x22.5x26/83.3x57x66	173/79	123/56		
JP-3304-0MHB	3300/228	3.3/12.5	11.0	OHV Honda	AR	33x22.5x26/83.3x57x66	186/85	136/62		
JP-3304-0MVB	3300/228	3.3/12.5	11.0	OHV Vanguard	AR	33x22.5x26/83.3x57x66	190/87	140/64	0	
JP-3504-0MHB	3500/241	3.5/13.3	13.0	OHV Honda	AR	33x22.5x26/83.3x57x66	186/85	136/62	1	
JP-3504-0MVB	3500/241	3.5/13.3	13.0	OHV Vanguard	AR	33x22.5x26/83.3x57x66	190/87	140/64		
JP-4003-0MHB	4000/276	3.0/11.4	13.0	OHV Honda	AR	33x22.5x26/83.3x57x66	186/85	136/62		
JP-4003-0MVB	4000/276	3.0/11.4	13.0	OHV Vanguard	AR	33x22.5x26/83.3x57x66	190/87	140/64		
JP-4004-0MVB	4000/275	4.0/15.1	16.0	OHV Varguard	AF	44x26x27/112x66x69	260/118	184/84		

Corporation - 800-553-9053

These contractor-grade pressure washers offer heavy-duty components, designed to fit into your budget.



Frame Design:

- 13. 1" powder coated steel tube handles, to resists breakage, with gun/wand holder
- 14. Pneumatic tires with tubes for longer life
- 15. 3/16 inch powder coated steel base plates to reduce vibration
- 16. Dual rubber isolators to absorb vibration
- 17. Convenient hose wrap



One (1) year limited parts and labor warranty Five (5) year limited warranty on pump

JP Series Pump:

- · Forged brass manifold for strength and long life
- Ultra form valve cages for durability, strength and long life
- U" cup double lip low pressure seals for a positive seal
- Oversized tapered roller bearings for maximum life and load disbursement
- Forged, precision ground and hardened crankshaft for extremely long life and durability
- Stainless steel plunger rods for strength, back-up and O-ring plunger sealing system







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Honda World Links

Honda Worldwide Home Products & Technology Power Products General Purpose Engines

Products

Turning People's Dreams into Reality

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Household Gas Engine Cogeneration Unit

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Lawnmowers » Outboard Engine

Electronic 4-wheel

Power Products News »

Honda's Power Products at Britain's Largest Gardening Event

Honda Adds "Yukios e!" to Designers Talk Site

Honda Exhibits at the 17th International Roses and Gardening Show

General Purpose Engines



Honda annually manufactures approximately five million general-purpose engines in six countries and provides them to 86 countries around the world as the power sources for various machines used in construction, industry, agriculture, home use lawn moving and gardening equipment, as well as various handheld devices including hedge trimmers.

The low fuel consumption, high output and compact size of the commercial-grade GX engines have made them the best sellers engine, with cumulative production since 1983 over 40 million units. There are seven models, ranging from 118 to 389 cm3 in total displacement. The overhead valve (OHV) mechanism and inclined cylinder . both world's firsts 1 in general-purpose engines . later became the industry standard. The GX engines are continually being refined to achieve even higher fuel economy while upgrading output and versatility. Many people expect that the new i-GX engine with a unique Honda's original STR governor will set a new world standard for its capability to respond to even more complicated work. The home use GC/GCV OHC engines adopted an internal (immersed) timing belt for the first time in the world*2, incorporated new materials, and reduced the number of parts to achieve both high environmental performance and low prices. A mini 4-stroke engine adopting oil-mist lubrication was developed as a handheld device power source, changing the paradigm that only 2-stroke engines could be used for work at virtually any angle. The GP engine is Honda's first light use engine for emerging nations.

Power Videos »



The Beauty Hand to Hand (01:24)



Happy together (01:24)



The Great Ocean -Honda Marine Promotional Video (02:03)

The Power Stories »



"Satoyama" Hello Woods



Experiencing the Joy of Nature Through Farming



Scaling K2 with Support of EU9

Power Products Guide



Honda Power Products Guide (PDF 16.8MB)

Separate Chapter PDF files





Honda Adds "Yukios Designers Talk Site

*1 *2 Honda internal research.

Commercial











Home Use



Light Use



Hand Held



Power Products Links





POWERED by HONDA

Approximately 70% of the general purpose engines manufactured by Honda are supplied as OEM engines to other manufacturers of power products. We have over 3,600 OEM customers in 86 countries around the world. The many products with the emblem "Powered by Honda" attest to the reliability of Honda power product engines.



Honda was one of the first companies to develop environmentally friendly 4-stroke engines.

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Honda's first general-purpose H type engine (released in 1953) was a 2-stroke 50cc engine, the same as the norm for the industry at that time.

However, during the development process of this engine, Soichiro Honda, the founder of the company, believed that "Not all people would accept a 2-stroke engine because it is hard to use, smells, emits smoke, and that general-purpose engines must be 4-stroke." All Honda general-purpose engines, from the second T type engine onward, have been 4-stroke engines that feature superior combustion efficiency, low fuel consumption and clean exhaust emissions.



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Homda Worldwide site

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